

# **DRAFT**

## **Intrinsic Remediation Engineering Evaluation/Cost Analysis for the Former AGE Fueling Facility Site**

### **Volume II: Appendices**



**Seymour Johnson Air Force Base  
Goldsboro, North Carolina**

**Prepared For**

**Air Force Center for Environmental Excellence  
Technology Transfer Division  
Brooks Air Force Base  
San Antonio, Texas**

**and**

**Seymour Johnson Air Force Base  
North Carolina**

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
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**April 1996**

**20000906 142**

**DTIC QUALITY INSPECTED 4**

**DRAFT**

**INTRINSIC REMEDIATION  
ENGINEERING EVALUATION/COST ANALYSIS FOR  
THE FORMER AGE FUELING FACILITY SITE  
VOLUME II**

**SEYMOUR JOHNSON AIR FORCE BASE  
GOLDSBORO, NORTH CAROLINA**

**April 1996**

**Prepared for:**

**AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE  
TECHNOLOGY TRANSFER DIVISION  
BROOKS AIR FORCE BASE  
SAN ANTONIO, TEXAS**

**AND**

**SEYMOUR JOHNSON AIR FORCE BASE  
NORTH CAROLINA**

**Prepared by:**

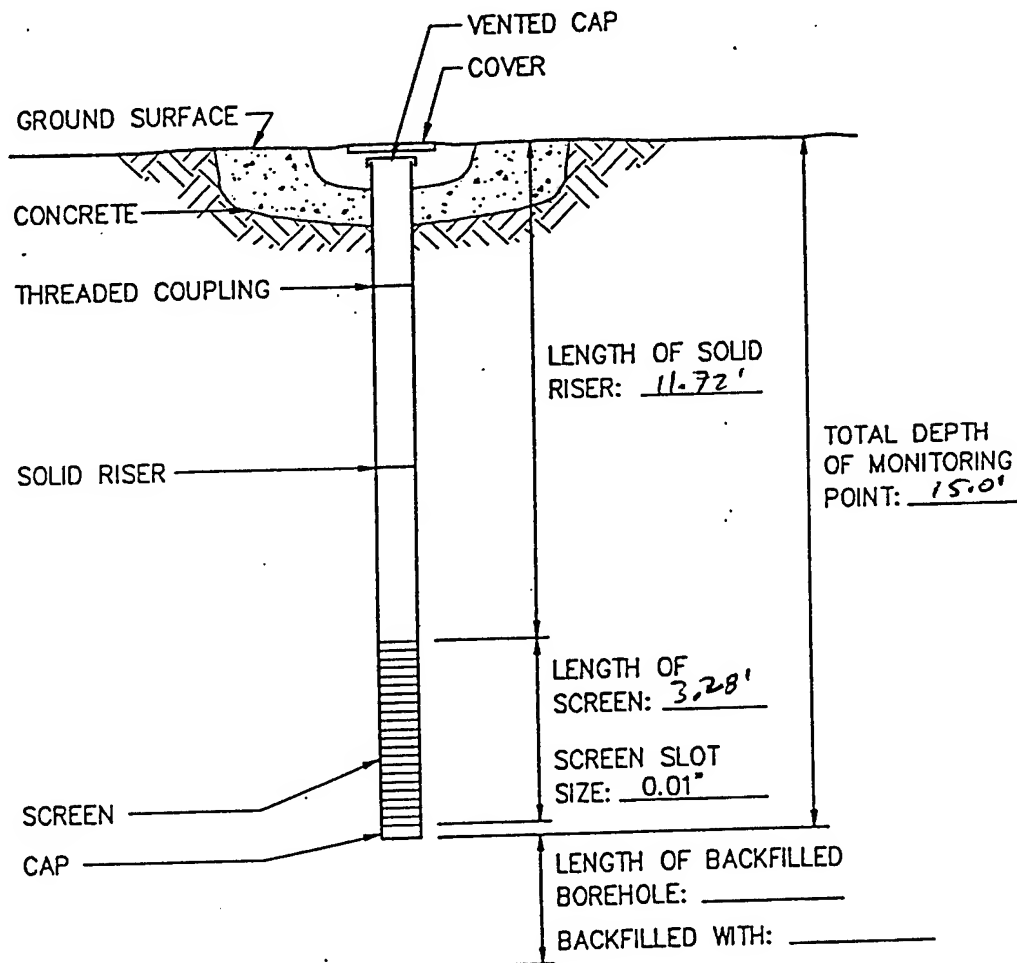
**PARSONS ENGINEERING SCIENCE, INC.  
1700 BROADWAY, SUITE 900  
DENVER, COLORADO 80290**

**APPENDIX A**

**BORING LOGS AND WELL COMPLETION DIAGRAMS**

# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER CPT-16  
 JOB NUMBER 722450.26 INSTALLATION DATE 1/21/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.01"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1.0"  
 CONE PENETROMETER CONTRACTOR USACE SCAPS ES REPRESENTATIVE T. Richardson



(NOT TO SCALE)

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC



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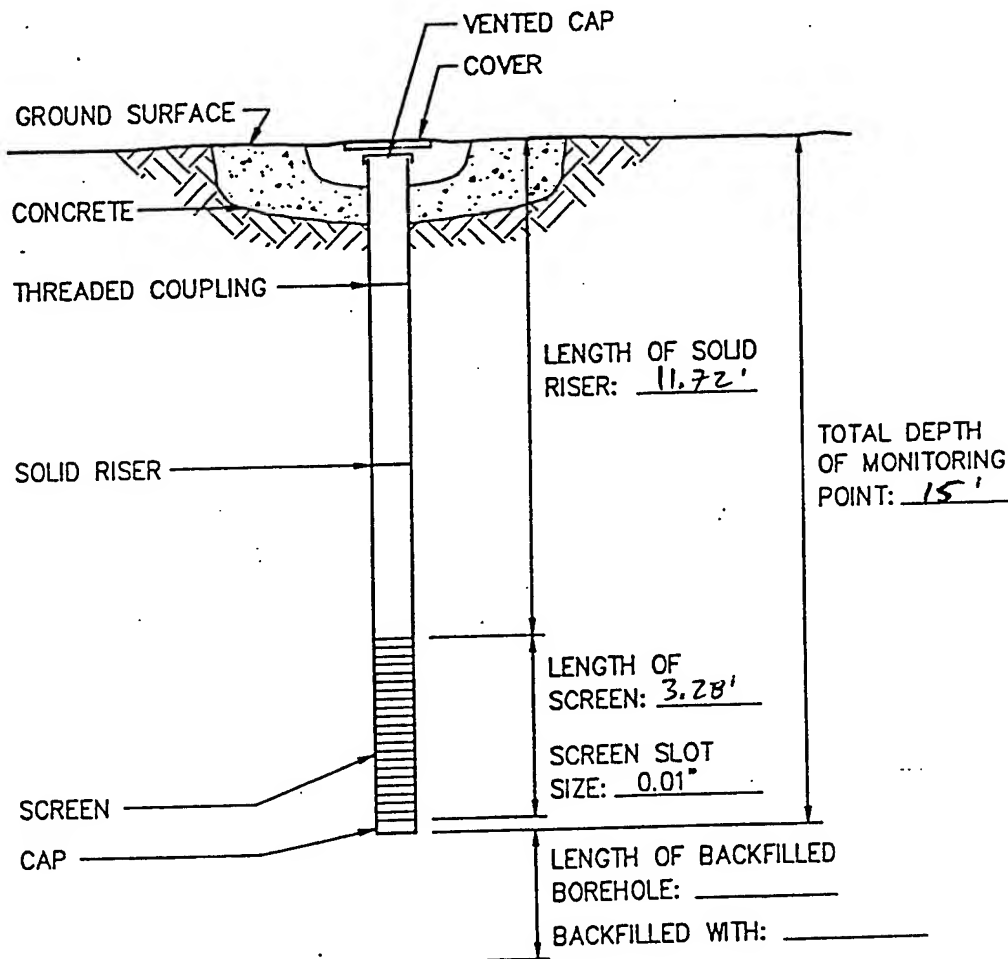
STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER CPT-17  
 JOB NUMBER 722450.26 INSTALLATION DATE 1/21/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.01"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1.0"  
 CONE PENETROMETER CONTRACTOR USACE SCAPS ES REPRESENTATIVE T. Richardson



(NOT TO SCALE)

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC



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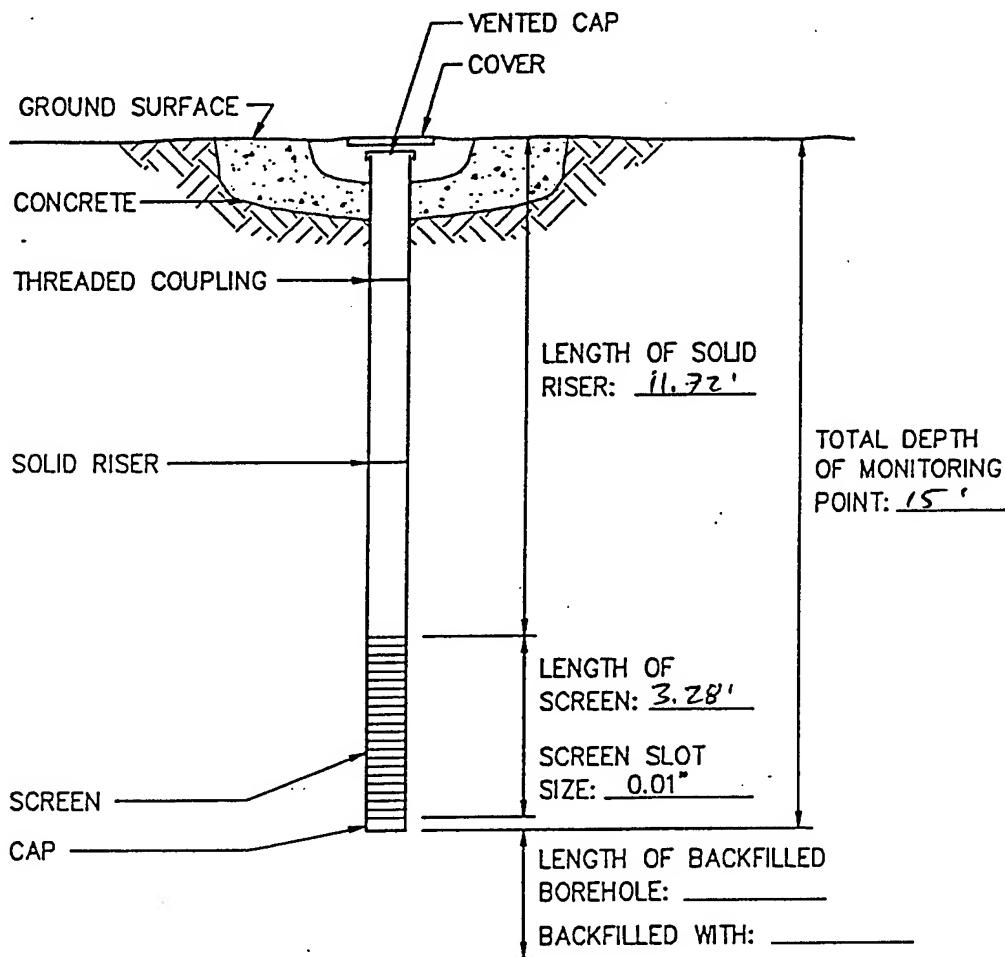
STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER CPT-18  
 JOB NUMBER 722450.26 INSTALLATION DATE 1/21/95 LOCATION B/Lg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.01"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1.0"  
 CONE PENETROMETER CONTRACTOR USACE SCAPS ES REPRESENTATIVE T. Richardson



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

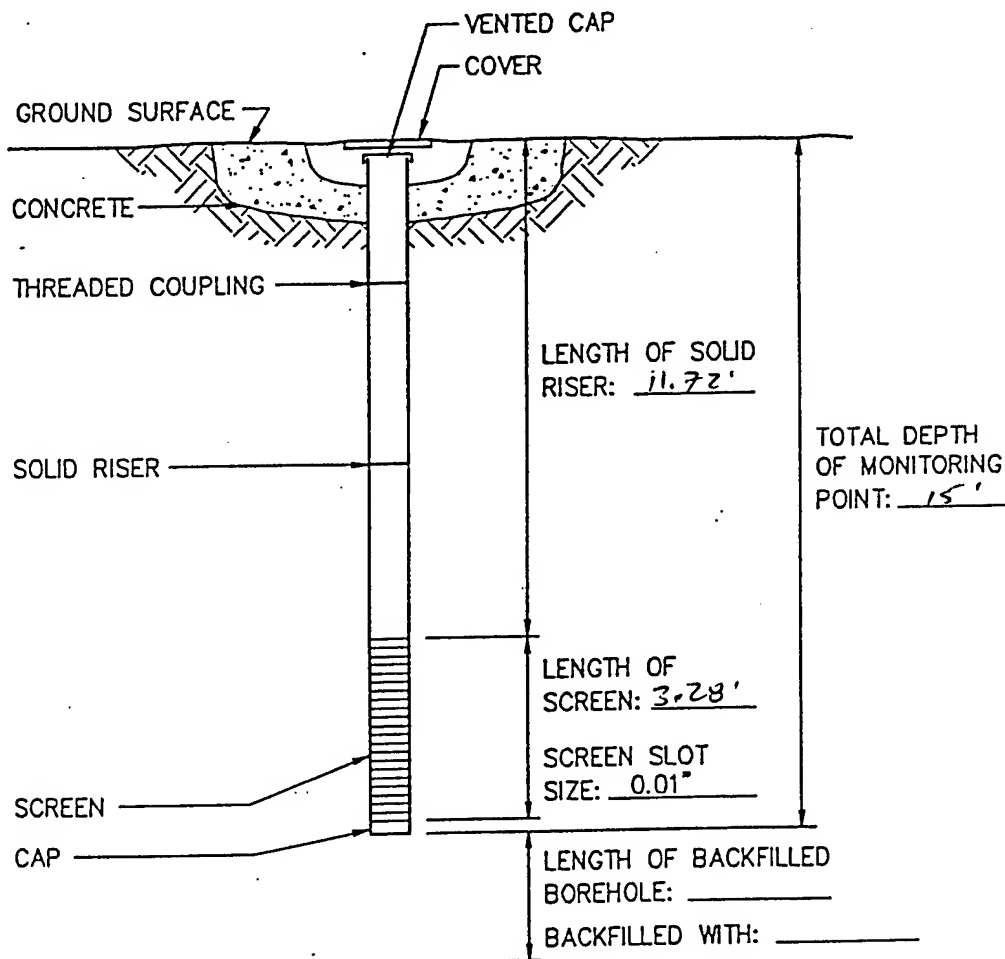


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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER CPT-19  
 JOB NUMBER 722450.26 INSTALLATION DATE 1/21/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.01"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1.0"  
 CONE PENETROMETER CONTRACTOR USACE SCAPS ES REPRESENTATIVE T. Richardson



(NOT TO SCALE)

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC



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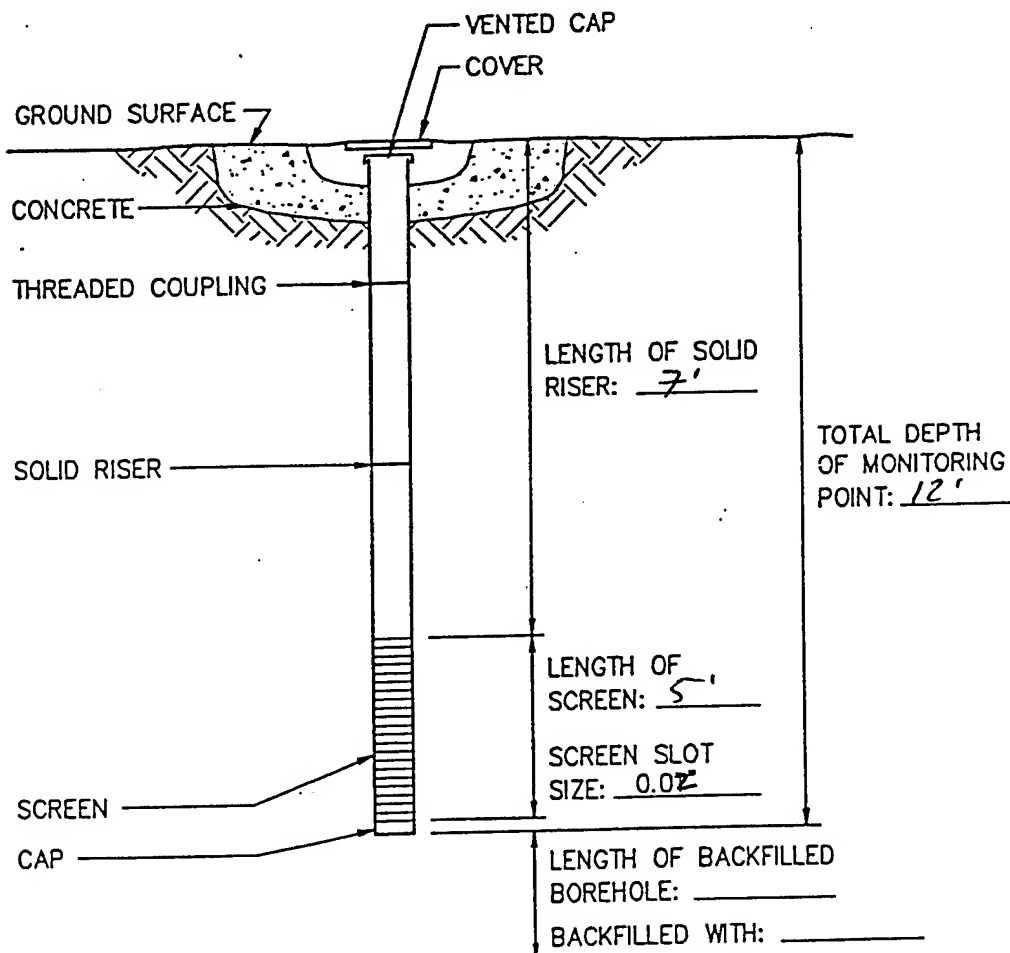
STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-2  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/11/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 1" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 1" PVC BOREHOLE DIAMETER 2"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
Former AGE Fuel Facility  
Seymour Johnson AFB, NC

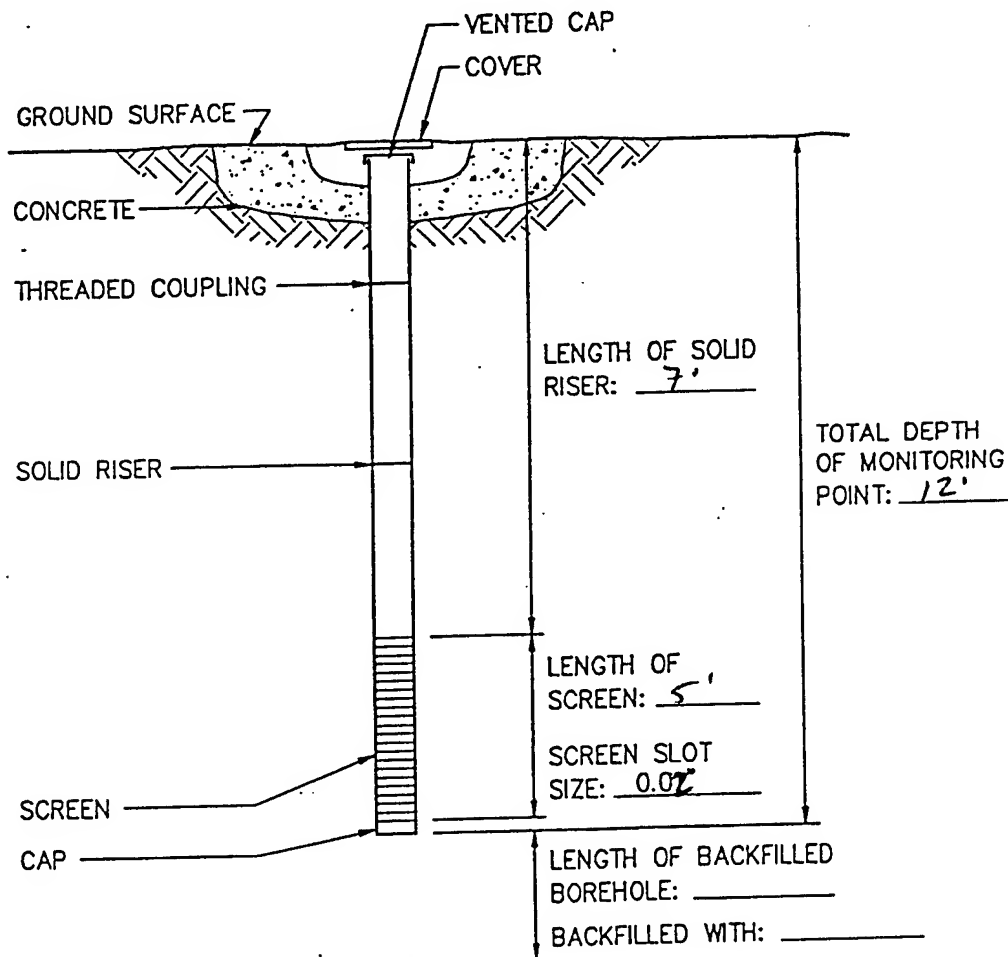


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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-3  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/11/95 LOCATION B16 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 1" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 1" PVC BOREHOLE DIAMETER 2"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC



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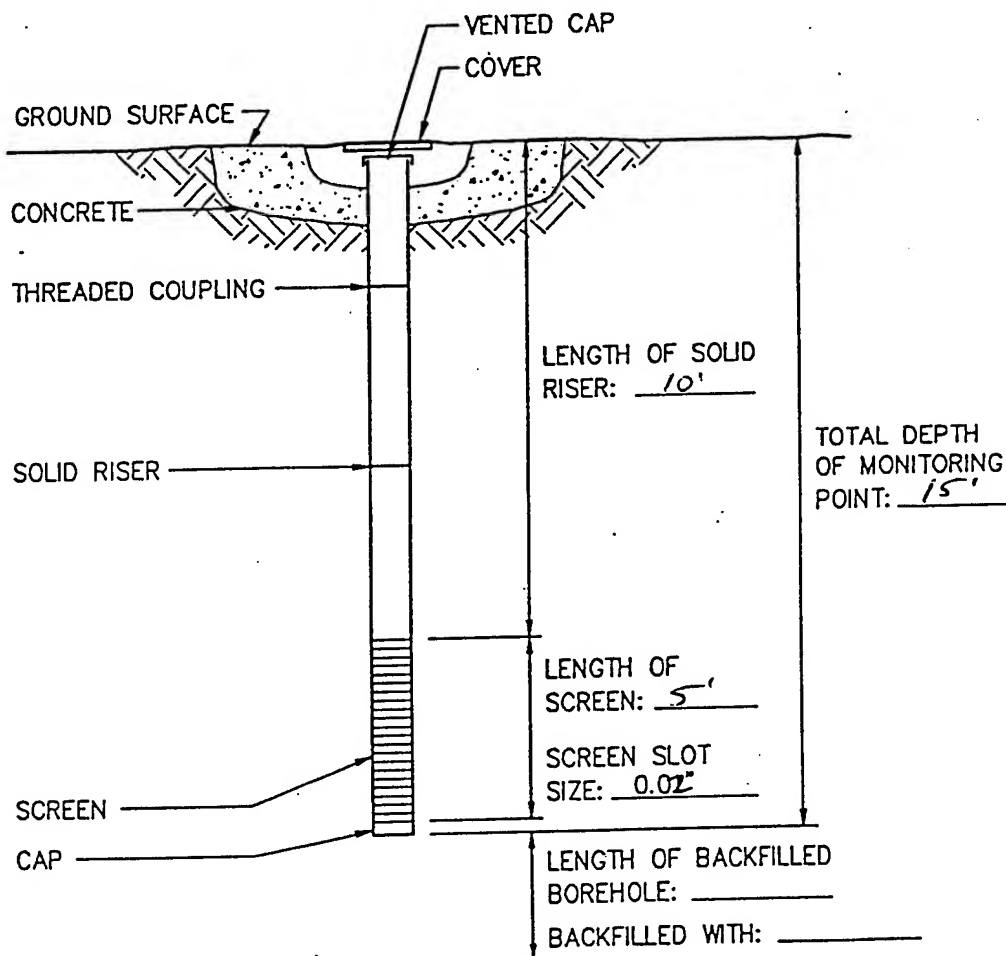
STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-4  
 JOB NUMBER 722450.26 INSTALLATION DATE \_\_\_\_\_ LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 1" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 1" PVC BOREHOLE DIAMETER 2"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKD



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

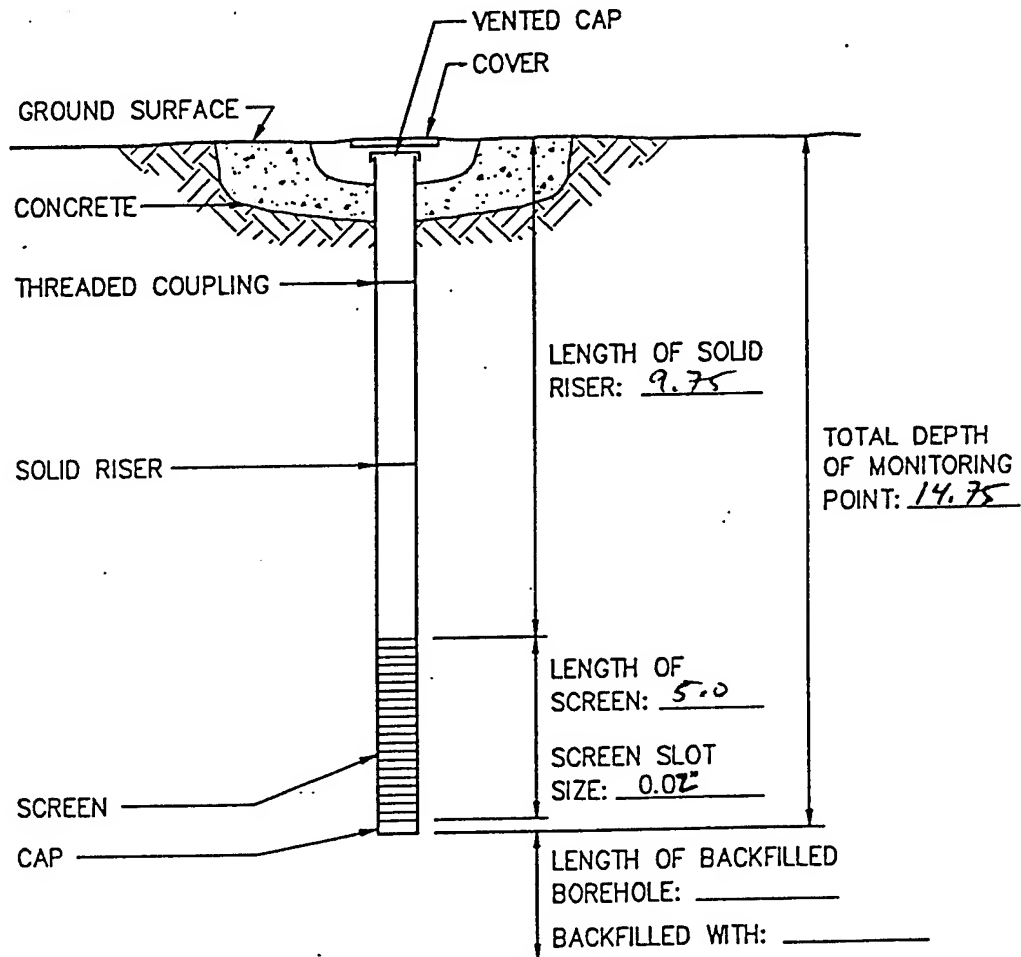


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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-5  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/11/95 LOCATION BLG 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKR



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

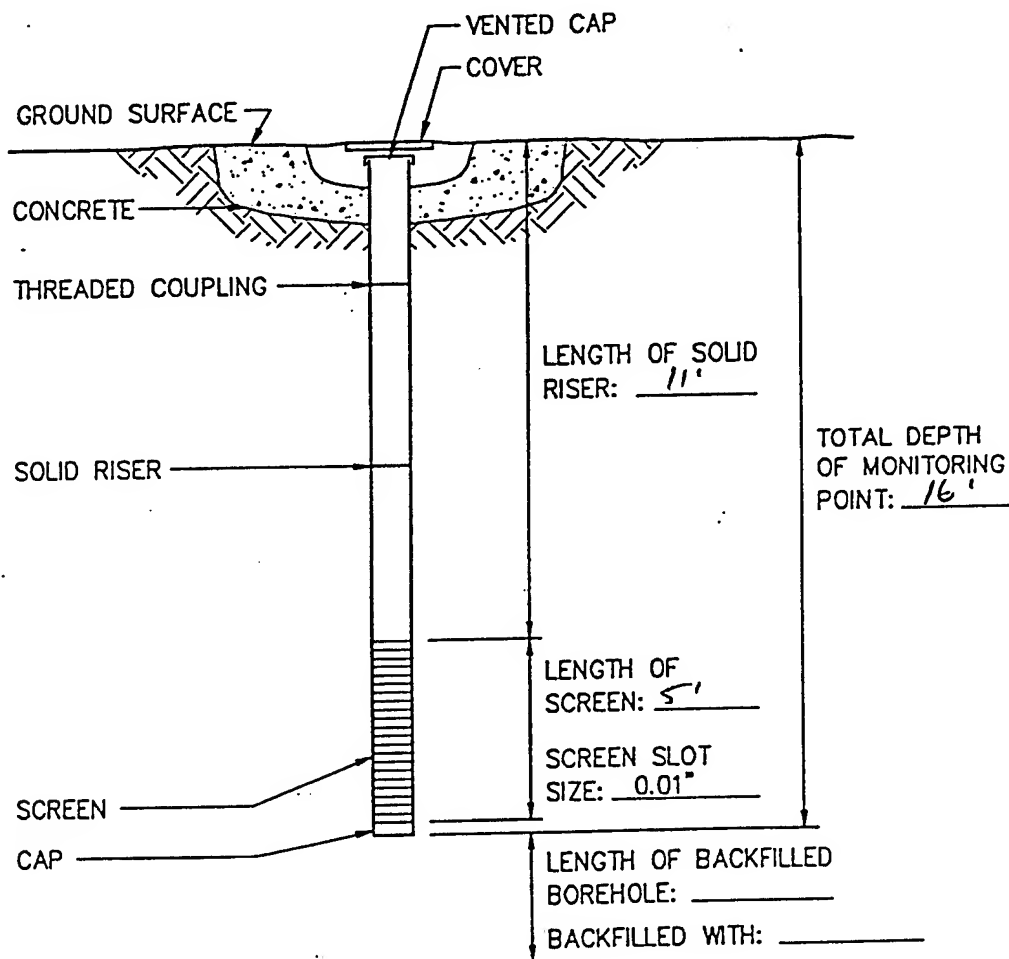


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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-6  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/12/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

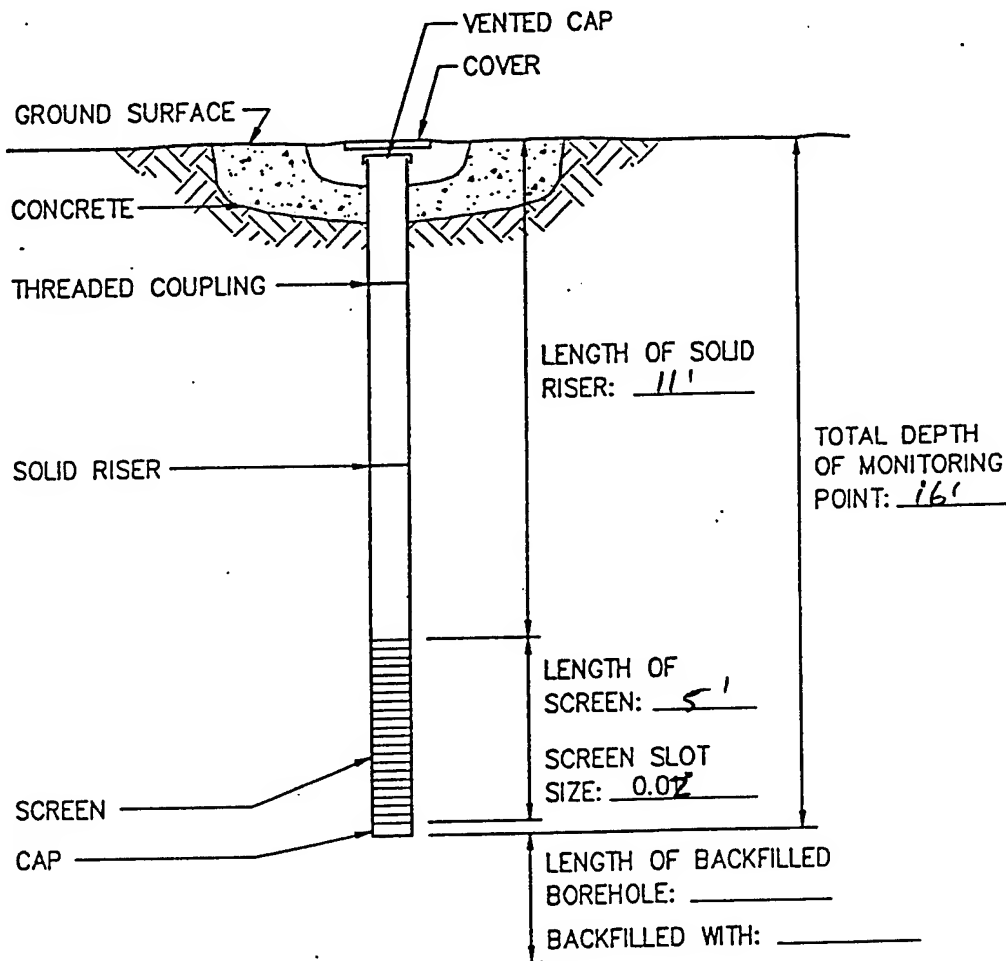


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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-7  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/12/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

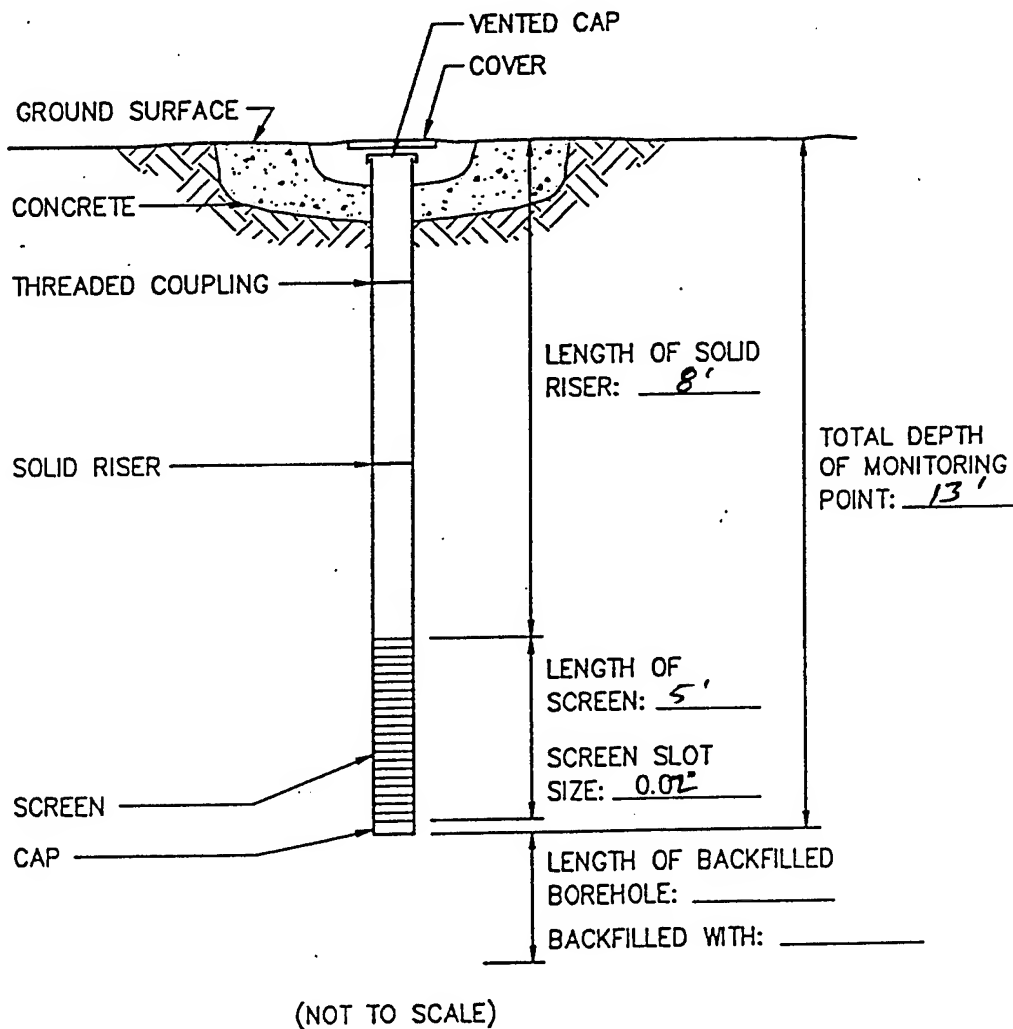


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## MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-8  
JOB NUMBER 722450.26 INSTALLATION DATE 4/12/95 LOCATION Bldg 4715  
DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
SCREEN DIAMETER & MATERIAL 1" PVC SLOT SIZE 0.02"  
RISER DIAMETER & MATERIAL 1" PVC BOREHOLE DIAMETER 2"  
CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TLR, MKIB



STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

**FIGURE 3.4**

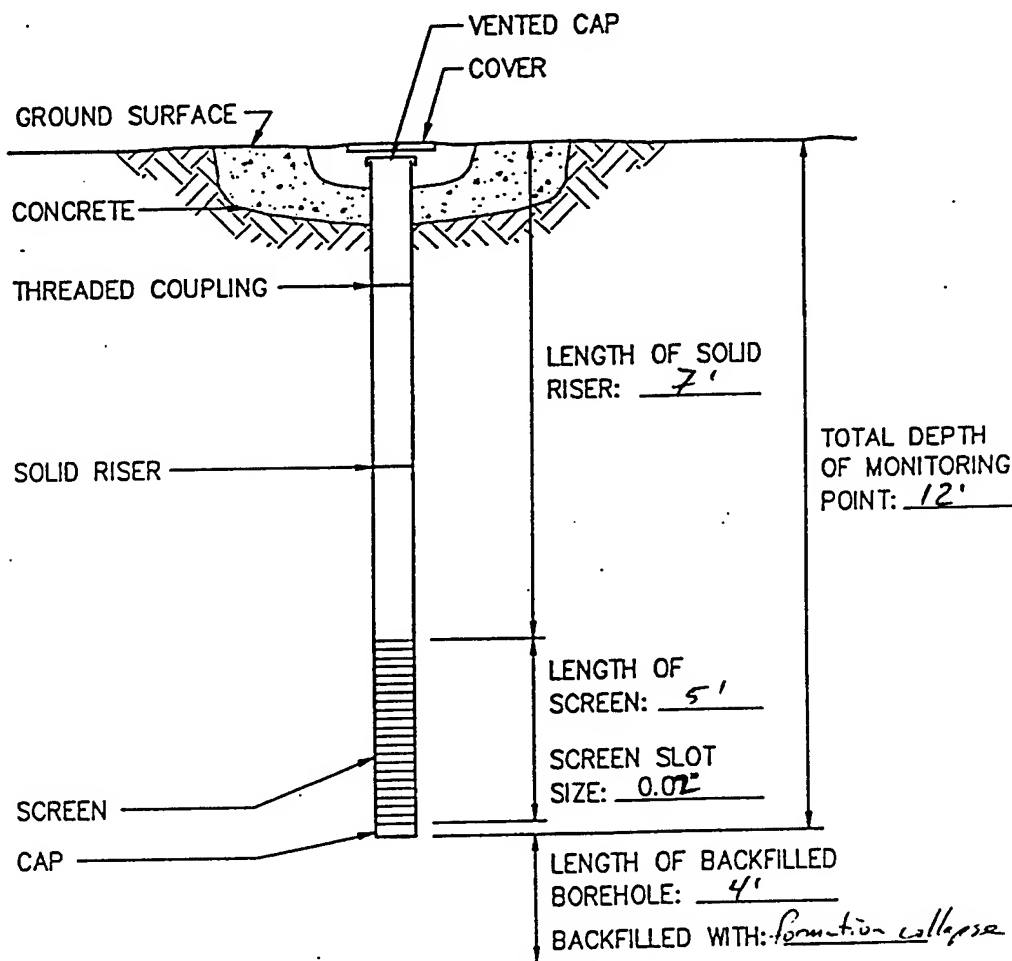
# MONITORING POINT INSTALLATION RECORD

**Intrinsic Remediation EE/CA  
Former AGE Fuel Facility  
Seymour Johnson AFB, NC**

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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-9  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/12/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

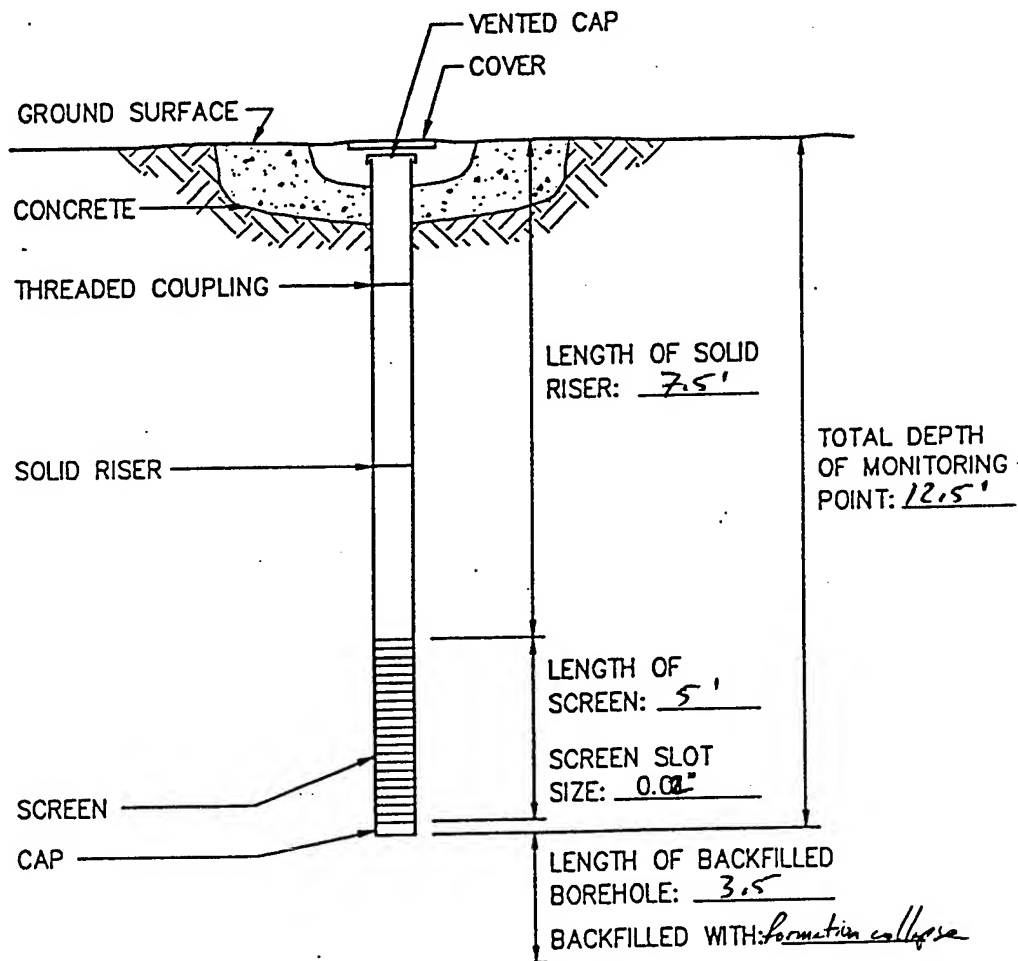


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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-10  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/12/95 LOCATION 31-4 47-5  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TJR, MKB



(NOT TO SCALE)

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC



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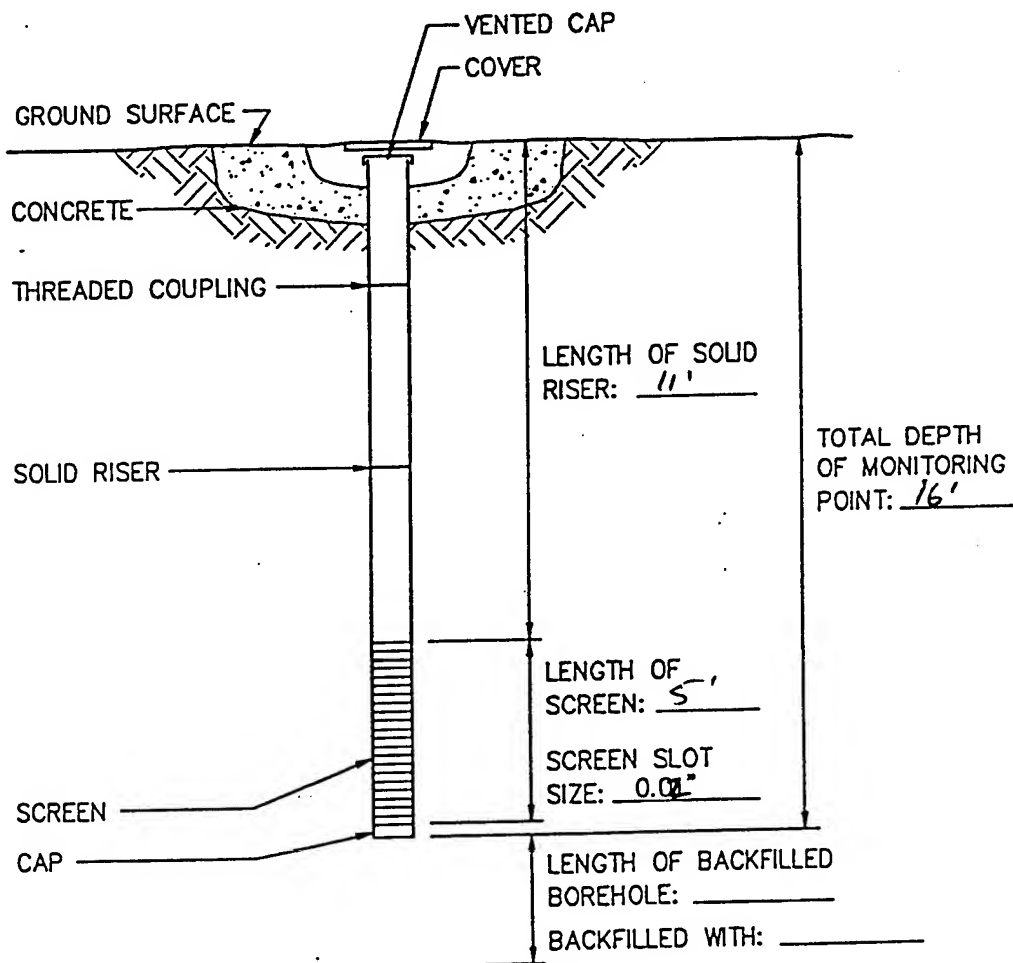
STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

# **MONITORING POINT INSTALLATION RECORD**

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-11  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/13/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" PVC SLOT SIZE 0.02"  
 RISER DIAMETER & MATERIAL 0.5" PVC BOREHOLE DIAMETER 1"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

**FIGURE 3.4**

## **MONITORING POINT INSTALLATION RECORD**

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

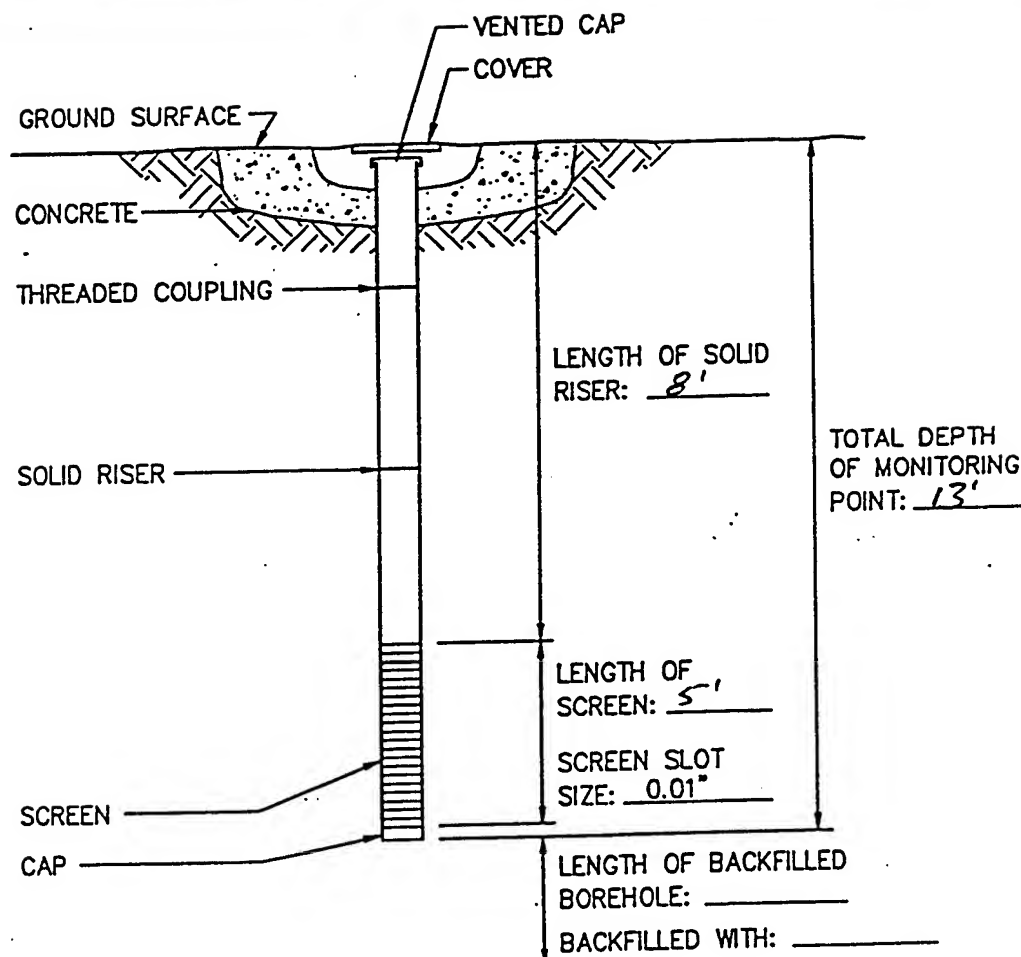


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# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-12  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/19/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 2" PVC SLOT SIZE 0.01"  
 RISER DIAMETER & MATERIAL 2" PVC BOREHOLE DIAMETER 3"  
 CONE PENETROMETER CONTRACTOR hand auger ES REPRESENTATIVE TLR, MKB



(NOT TO SCALE)

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC



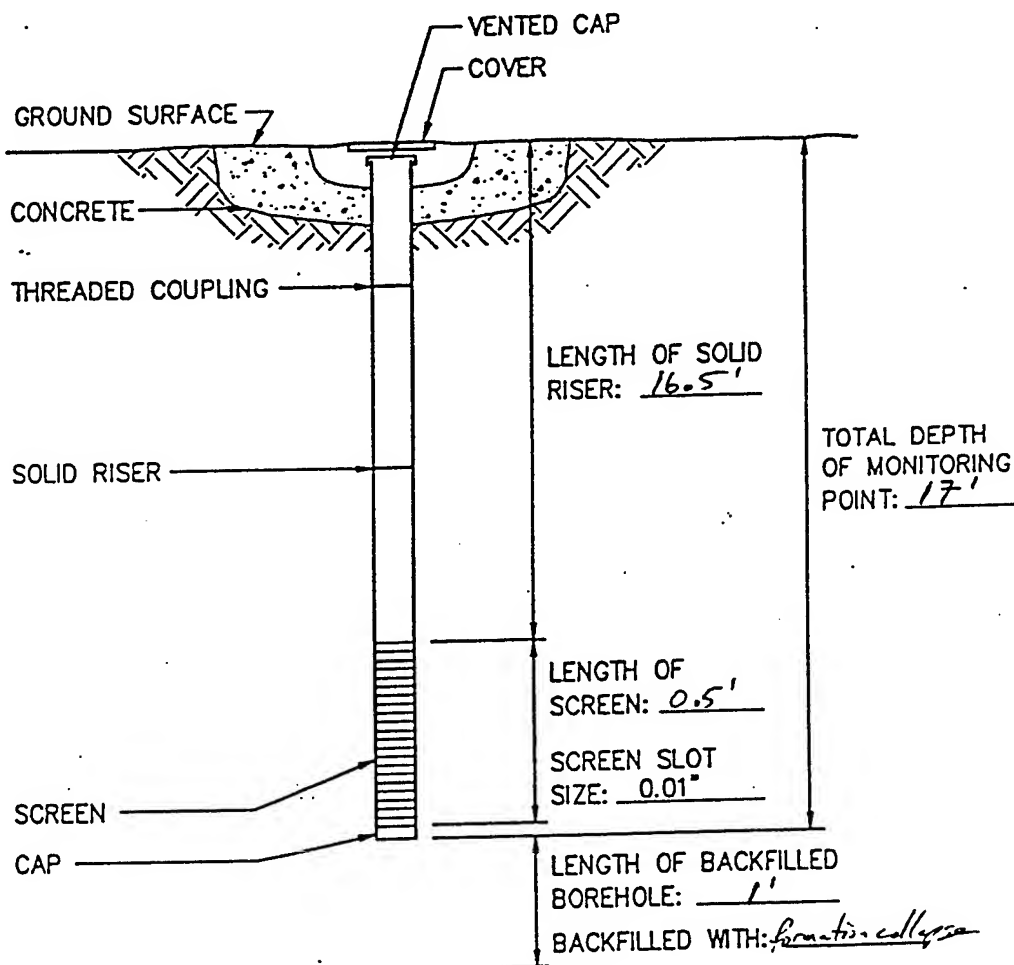
**PARSONS  
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Cary, North Carolina

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-12D  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/13/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 0.5" stainless steel SLOT SIZE \_\_\_\_\_  
 RISER DIAMETER & MATERIAL 0.375" polyethylene BOREHOLE DIAMETER 0.5"  
 CONE PENETROMETER CONTRACTOR Geoprobe ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.  
 TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.  
 GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

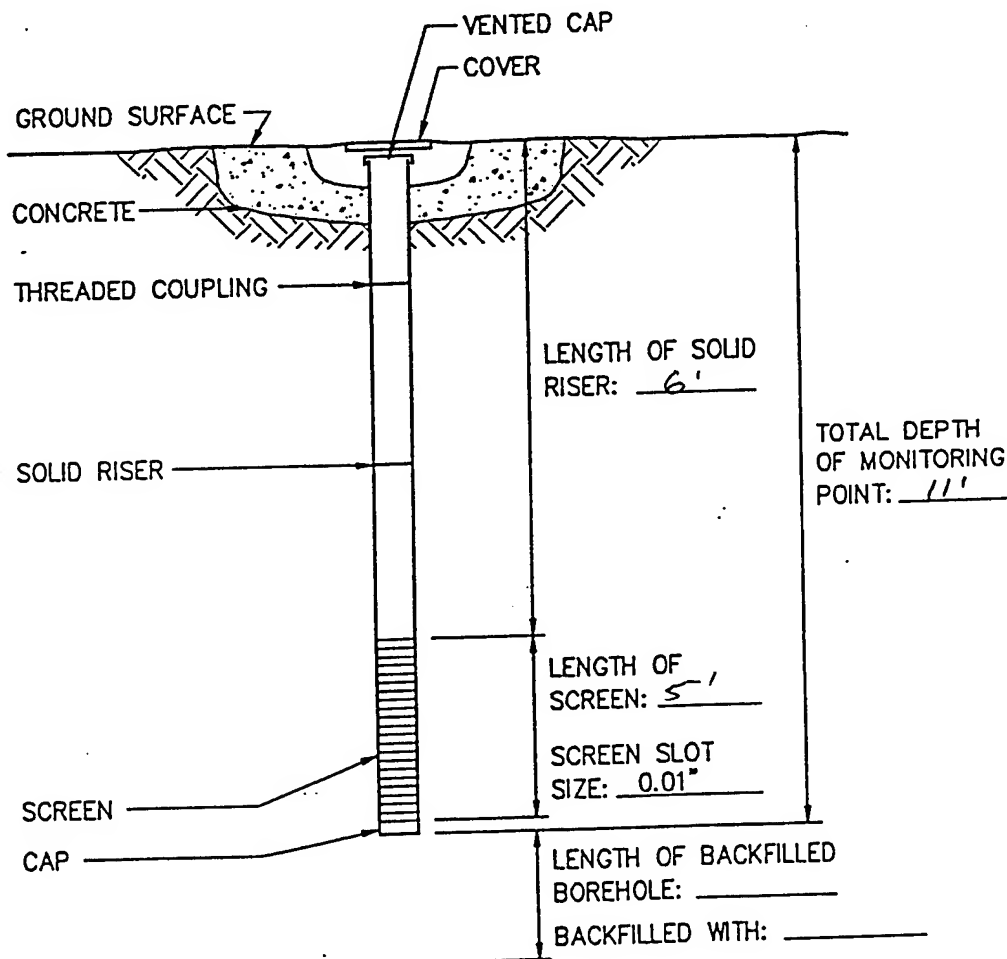


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Cary, North Carolina

# MONITORING POINT INSTALLATION RECORD

JOB NAME SEYMOUR JOHNSON AIR FORCE BASE MONITORING POINT NUMBER MW-13  
 JOB NUMBER 722450.26 INSTALLATION DATE 4/17/95 LOCATION Bldg 4715  
 DATUM ELEVATION \_\_\_\_\_ GROUND SURFACE ELEVATION \_\_\_\_\_  
 DATUM FOR WATER LEVEL MEASUREMENT \_\_\_\_\_  
 SCREEN DIAMETER & MATERIAL 2" PVC SLOT SIZE 0.01"  
 RISER DIAMETER & MATERIAL 2" PVC BOREHOLE DIAMETER 3"  
 CONE PENETROMETER CONTRACTOR Hand Auger ES REPRESENTATIVE TCR, MKB



(NOT TO SCALE)

STABILIZED WATER LEVEL \_\_\_\_\_ FEET  
 BELOW DATUM.

TOTAL MONITORING POINT DEPTH \_\_\_\_\_ FEET  
 BELOW DATUM.

GROUND SURFACE \_\_\_\_\_ FEET

FIGURE 3.4

## MONITORING POINT INSTALLATION RECORD

Intrinsic Remediation EE/CA  
 Former AGE Fuel Facility  
 Seymour Johnson AFB, NC

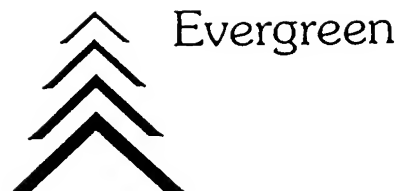


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Cary, North Carolina

**APPENDIX B**

**SOIL AND GROUNDWATER ANALYTICAL DATA**



Evergreen

July 20, 1995

MR TODD WIEDEMEIER  
PARSONS ENGINEERING SCIENCE INC  
1700 BROADWAY SUITE 900  
DENVER CO 80290

Data Reports : 95-2193  
Client Project : 722450.26  
Seymour Johnson

Dear Mr. Wiedemeier:

Enclosed are the analytical results for the samples shown in the Sample Log Sheet. The enclosed data have been reviewed for quality assurance. If you have any questions concerning the reported information, please contact Patty McClellan, Program Manager, or me.

**Please Note:** Samples marked for return on the Sample Log Sheet are considered hazardous, unsuitable for municipal disposal or were placed on hold at your request. Samples considered hazardous or unsuitable for municipal disposal will be returned to you immediately. Samples placed on hold will be returned and samples not considered hazardous will be disposed of one (1) month from the date of this letter.

The invoice for this work will be mailed to your Accounts Payable department shortly.

Thank you for using the services of Evergreen Analytical.

Sincerely,

Jack Barney  
President

TM



## CASE NARRATIVE

Evergreen Analytical Laboratory (EAL) Project: 95-2193

Parsons Engineering Science, Inc. (PES) Project: Seymour Johnson AFB  
722450.26

### Sample Receipt

Nine groundwater samples were received on July 11, 1995 at EAL for analysis under Subcontract 722450.SC02. Refer to the EAL Check-in Record for specific information regarding the condition of samples upon receipt. Refer to the EAL Sample Log Sheet for specific log-in information and cross-reference of EAL and PES sample identifications.

### BTEX, Trimethylbenzenes, Tetramethylbenzene, Chlorobenzene, Method SW8020

1,3,5-Trimethylbenzene was detected in Method Blank MB1071295 at less than two times the reliable detection limit (RDL). The associated sample has been "B" flagged.

There are no other quality control anomalies to report.

### Total Volatile Hydrocarbons (TVH), Method 8015M

There are no quality control anomalies to report.

### Total Extractable Hydrocarbons (TEH), Method 8015M

There are no quality control anomalies to report.

### Methane, Method RSKSOP-175

There are no quality control anomalies to report.


### Anions, Method EPA 300.0

There are no quality control anomalies to report.

### Disk Deliverables

The disk deliverables are included with the hard copy package. Matrix spike, matrix spike duplicate and laboratory duplicate samples are not included on the disk. Please note that blank spaces in the laboratory detection limit and/or practical quantitation limit (PQL) column indicate that there is no detection limit or PQL for that analyte.

A hard copy the spreadsheet is included.

  
\_\_\_\_\_  
Patricia A. McClellan, Program Manager

# Evergreen Analytical Sample Log Sheet

Project # 95-2193

Date(s) Sampled: 07/10/95 COC

Date Due: 07/18/95-UST  
07/25/95-ANIONS

Sample Received: 07/11/95 0920

Holding Time(s): 07/12-NO2,NO3  
07/17-TEH;07/24-BTEX,TVH  
Rush STANDARD

Client Project I.D. 722450.26

Client: PARSONS ENGINEERING SCIENCE

Address: 1700 BROADWAY, SUITE 900

DENVER, CO 80290

Contact: TODD WIEDEMEIER

Client P.O. \_\_\_\_\_

Phone #831-8100 Fax #831-8208

Shipping Charges N/A

E.A. Cooler # 475

Airbill # FED EX 6475871920

Custody Seal Intact? N/A

Cooler \_\_\_\_\_ Bottles \_\_\_\_\_

COC Present Y

Sample Tags Present? Y

Sample Tags Listed? Y

Sample(s) Sealed? Y

Special Invoicing/Billing \_\_\_\_\_

Special Instructions ✓ 1 SAMPLE BROKEN IN TRANSIT. ★ ALL BTEX ARE TO INCLUDE  
CHLOROBENZENE, TMB AND TEMB.

| Lab ID #  | Client ID# | Analysis | Mtx | Btl | Loc |
|-----------|------------|----------|-----|-----|-----|
| 8735A-C   | MW-16      | ★ BTEX   | W   | 40V | 2   |
| X08736A-C | MW-17      | ★ BTEX   | W   | 40V | 2   |
| X08737A-C | MW-15      | ★ BTEX   | W   | 40V | 2   |
| X08738A-C | MW-14      | ★ BTEX   | W   | 40V | 2   |
| X08739A-C | MW-19      | ★ BTEX   | W   | 40V | 2   |
| X08740A-C | MW-18      | ★ BTEX   | W   | 40V | 2   |
| X08741A-C | MW-20      | ★ BTEX   | W   | 40V | 2   |
| X08742A-C | MW-21      | ★ BTEX   | W   | 40V | 2   |
| X08743A-C | TRIP BLANK | ★ BTEX   | W   | 40V | 2   |
| X08735D-F | MW-16      | TVH      | W   | 40V | 2   |
| X08736D-F | MW-17      | TVH      | W   | 40V | 2   |
| X08737D-F | MW-15      | TVH      | W   | 40V | 2   |
| X08738D-F | MW-14      | TVH      | W   | 40V | 2   |
| X08739D-F | MW-19      | TVH      | W   | 40V | 2   |
| X08740D-F | MW-18      | TVH      | W   | 40V | 2   |

R = Samples to be returned

Route GC/MS \_\_\_\_\_ GC 5 Metals \_\_\_\_\_ Wet Chem 1 SxPrep 1 Acctg 1

SxRec C QA/QC C Sales C File Orig

| Lab<br>ID # | Client<br>ID# | Analysis  | Mtx | Btl  | Loc |
|-------------|---------------|---|-----|------|-----|
| X08741D/E   | MW-20         | ✓ TVH   | W   | 40V  | 2   |
| 08735G-I    | MW-16         | METHANE   | W   | 40V  | 2   |
| X08736G-I   | MW-17         | METHANE   | W   | 40V  | 2   |
| X08737G-I   | MW-15         | METHANE   | W   | 40V  | 2   |
| X08738G-I   | MW-14         | METHANE   | W   | 40V  | 2   |
| X08739G-I   | MW-19         | METHANE   | W   | 40V  | 2   |
| X08740G-I   | MW-18         | METHANE   | W   | 40V  | 2   |
| X08741G-I   | MW-20         | METHANE   | W   | 40V  | 2   |
| X08735J     | MW-16         | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| X08736J     | MW-17         | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| X08737J     | MW-15         | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| X08738J     | MW-14         | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| X08739J     | MW-19         | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| X08740J     | MW-18         | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| X08741J     | MW-20         | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| X08735K     | MW-16         | TEH   | W   | 1LA  | C3  |
| X08736K     | MW-17         | TEH   | W   | 1LA  | C3  |
| X08737K     | MW-15         | TEH   | W   | 1LA  | C3  |
| 3738K       | MW-14         | TEH   | W   | 1LA  | C3  |
| X08739K     | MW-19         | TEH   | W   | 1LA  | C3  |
| X08740K     | MW-18         | TEH   | W   | 1LA  | C3  |
| X08741K     | MW-20         | TEH   | W   | 1LA  | C3  |

Page 2 of 2 Pages

Project # 94-2193

R=Sample to be returned

Date & Time Rec'd: 7/11/95 0920 Shipped Via: Fed ex  
(Airbill # if applicable)

(Airbill # if applicable)

EAL Cooler(s): (Y) N

Temperature °C 70

|   |   |     |
|---|---|-----|
| Y | N | N/A |
|---|---|-----|

- |  |                                     |                                     |                                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Custody seal(s) present:<br>Seals on cooler intact<br>Seals on bottle intact  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Chain of Custody present:   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3. Containers broken or leaking:<br>(Comment on COC if Y) <i>COC</i>   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Containers labeled:   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5. COC agrees w/ bottles received:<br>(Comment on COC if N)  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 6. COC agrees w/ labels:<br>(Comment on COC if N)  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 7. Headspace in VOA vials-waters only<br>(comment on COC if Y)   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 8. VOA samples preserved:  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 9. pH measured on metals, cyanide or phenolics*:<br>List discrepancies _____<br>*Non-EAL provided containers only, water samples only. | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10. Metal samples present:<br>Total _____, Dissolved _____<br>D or PD to be filtered:<br>T,TR,D,PD to be Preserved:                    | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 11. Short holding times:<br>Specify parameters <i>Anions-NO<sub>2</sub>, NO<sub>3</sub></i>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 12. Multi-phase sample(s) present:   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 13. COC signed w/ date/time:   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

Comments: One TVH vial was rec'd broken for mw-20 pm 7/11/95

(Additional comments on back)

(Additional comments on back)  
Custodian Signature/Date: Trina Woods 7/11/95

# CHAIN OF CUSTODY RECORD / ANALYTICAL SERVICES REQUEST

Page 1 of 1

## Evergreen Analytical Inc.

4036 Youngfield St.  
Wheat Ridge, Colorado 80033  
(303) 425-6021  
FAX (303) 425-6854  
(800) 845-7400

COMPANY Parsons ES

ADDRESS 401 Harrison Oaks Blvd Suite 210

CITY Carly STATE NC ZIP 273513

PHONE# (919) 677-0080 FAX (919) 677-0118

Sampler Name:

(signature) Thomas C. Richardson  
(print) Thomas C. Richardson

Evergreen Analytical Cooler No. 475

Cooler Received

Please **PRINT**

all information:

CLIENT MW-16 DATE 7/10/95 TIME 1030  
SAMPLE IDENTIFICATION MW-17 DATE 7/10/95 TIME 1145  
MW-15 DATE 7/10/95 TIME 1245  
MW-14 DATE 7/10/95 TIME 1350  
MW-19 DATE 7/10/95 TIME 1530  
MW-18 DATE 7/10/95 TIME 1615  
MW-20 DATE 7/10/95 TIME 1715  
MW-21 DATE 7/10/95 TIME 1745  
TRIP BLANK DATE 7/10/95 TIME 3

| MATRIX     | ANALYSIS REQUESTED |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  |                         | EAL use only<br>Do not write<br>in shaded area |                       |  |  |                                     |     |           |           |                |
|------------|--------------------|--|--------------|--------------|--|-----------------------------|-----------------------|------------------------------|---------------------------------|------------------------------|------------|--------------------------------------|--|-------------------------|--|-----------------------|--|--|-------------------------------------|-----|-----------|-----------|----------------|
|            | No. of Containers  | Water-Drinking/Discharge/Ground (circle) | Soil / Solid | Oil / Sludge | TCLP VOA/BNA/Pest/Herb/Metals (circle) | VOA 8260/624/524.2 (circle) | BNA 8270/625 (circle) | Pesticides 8080/608 (circle) | Pest/PCBs 8080/608/508 (circle) | Herbicides 8150/515 (circle) | PCB Screen | BTEX 9020/602 (circle)/MTBE (circle) | TRPH 418.1/Oil & Grease 413.1 (circle) | TPH 8015mod. (Gasoline) |  | TPH 8015mod. (Diesel) | Total Metals-DW / NPDES / SW846 (circle & list metals below) | Dissolved Metals - DW / SW846 (circle & list metals below) | Metals (circle & list metals below) | EAL | Project # | Custodian | EAL Sample No. |
| MW-16      | 11                 |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| MW-17      | 11                 |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| MW-15      | 11                 |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| MW-14      | 11                 |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| MW-19      | 11                 |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| MW-18      | 11                 |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| MW-20      | 11                 |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| MW-21      | 3                  |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  | 3                       | 1  | 3                     | 1  | 3  | 1                                   |     |           |           |                |
| TRIP BLANK | 3                  |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  |                         |  |                       |  |  |                                     |     |           |           |                |
| HT:        |                    |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  |                         |  |                       |  |  |                                     |     |           |           |                |
| DD:        |                    |  |              |              |  |                             |                       |                              |                                 |                              |            |                                      |  |                         |  |                       |  |  |                                     |     |           |           |                |

Instructions: Fed x B.Y #6475871920

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report  
Method Blank Report

Method Blank Number : MB1071195  
Date Prepared : 7/11/95  
Date Analyzed : 7/11/95

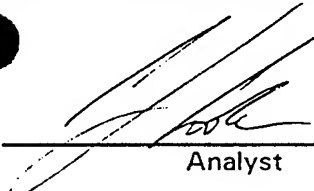
Client Project No. : 722450.26  
Lab Project No. : 95-2193  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX1071112

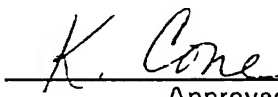
| Compound Name   | Cas Number                     | Sample Concentration ug/L | RL ug/L              |
|---|--------------------------------|---------------------------|----------------------|
| Benzene   | 71-43-2                        | U                         | 0.4                  |
| Toluene   | 108-88-3                       | U                         | 0.4                  |
| Chlorobenzene   | 108-90-7                       | U                         | 0.4                  |
| Ethyl Benzene   | 100-41-4                       | U                         | 0.4                  |
| Total Xylenes (m, p & o)  | 108-38-3, 106-42-3 and 95-47-6 | U                         | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                       | U                         | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                        | U                         | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                       | U                         | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                       | U                         | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                | 94%                       | 70%-130% (QC limits) |

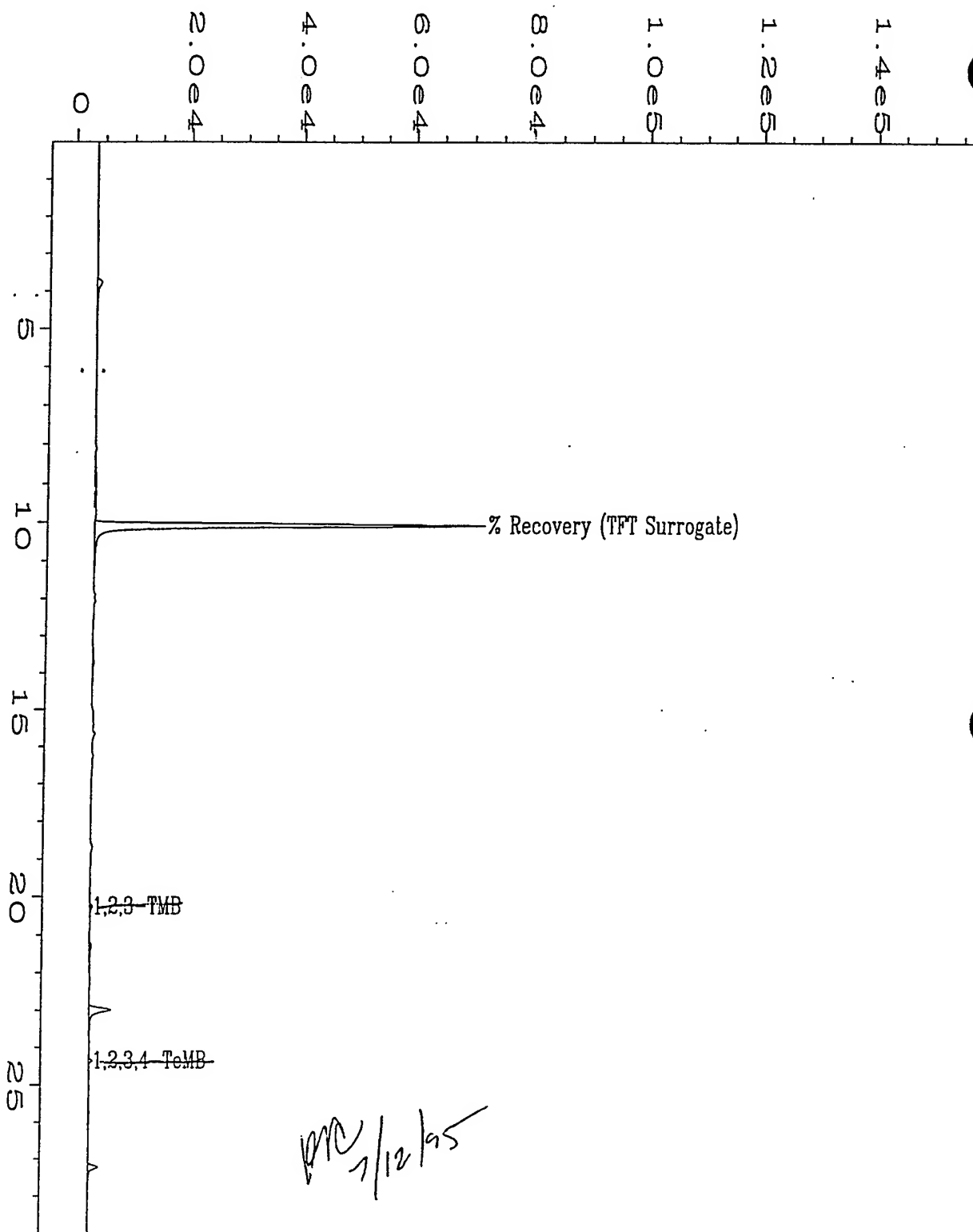
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



*MC 7/12/95*

|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\012F0901.D | Page Number       | : 1          |
| Operator           | : C.J. Cook                           | Vial Number       | : 12         |
| Instrument         | : BTEX1                               | Injection Number  | : 1          |
| Sample Name        | : MB1071195                           | Sequence Line     | : 9          |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.MT |
| quired on          | : 11 Jul 95 06:30 PM                  | Analysis Method   | : BX10711.MT |
| port Created on:   | : 12 Jul 95 11:59 AM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report  
Method Blank Report

Method Blank Number : MB1071295  
Date Prepared : 7/12/95  
Date Analyzed : 7/12/95

Client Project No. : 722450.26  
Lab Project No. : 95-2193  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX1071210

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 0.9                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 93%                          | 70%-130% (QC limits) |

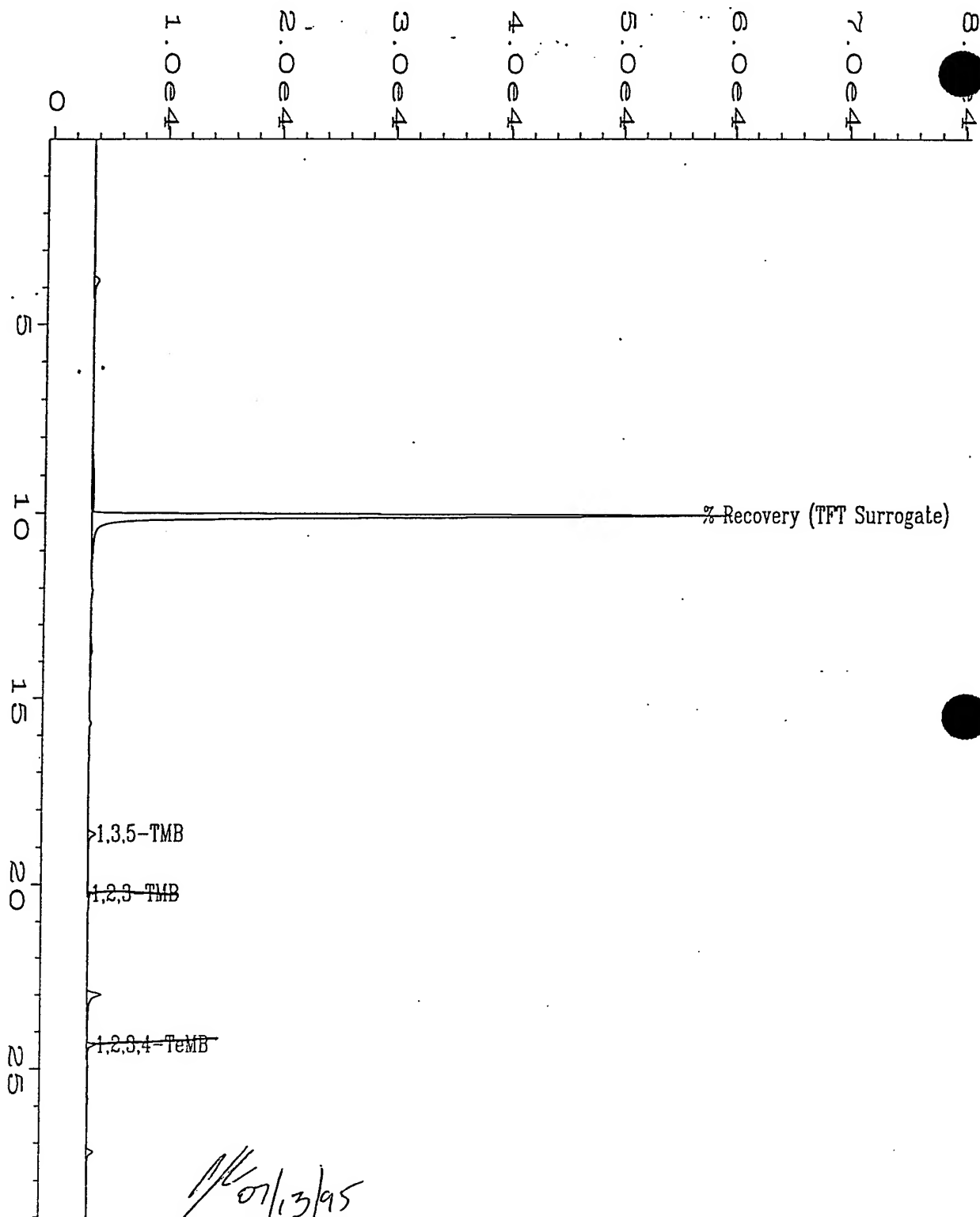
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |             |
|--------------------|---------------------------------------|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10712\010F0801.D | Page Number        | : 1         |
| Operator           | : C.J. Cook                           | Vial Number        | : 10        |
| Instrument         | : BTEX1                               | Injection Number   | : 1         |
| Sample Name        | : MB1071295                           | Sequence Line      | : 8         |
| Run Time Bar Code: |                                       | Instrument Method: | BX10712.M   |
| Required on        | : 12 Jul 95 05:53 PM                  | Analysis Method    | : BX10712.M |
| Report Created on: | 13 Jul 95 10:33 AM                    | Sample Amount      | : 0         |
| Last Recalib on    | : 12 JUL 95 04:18 PM                  | ISTD Amount        | :           |
| Multiplier         | : 1                                   |                    |             |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

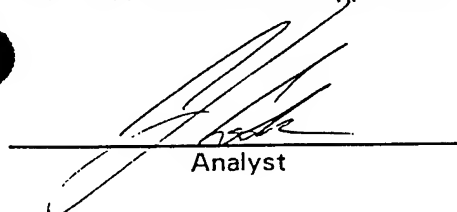
|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-16   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08735  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071113 |
|                      |           | Method Blank No.   | : MB1071195 |

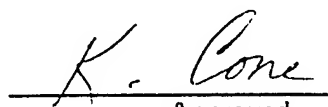
| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 96%                          | 70%-130% (QC limits) |

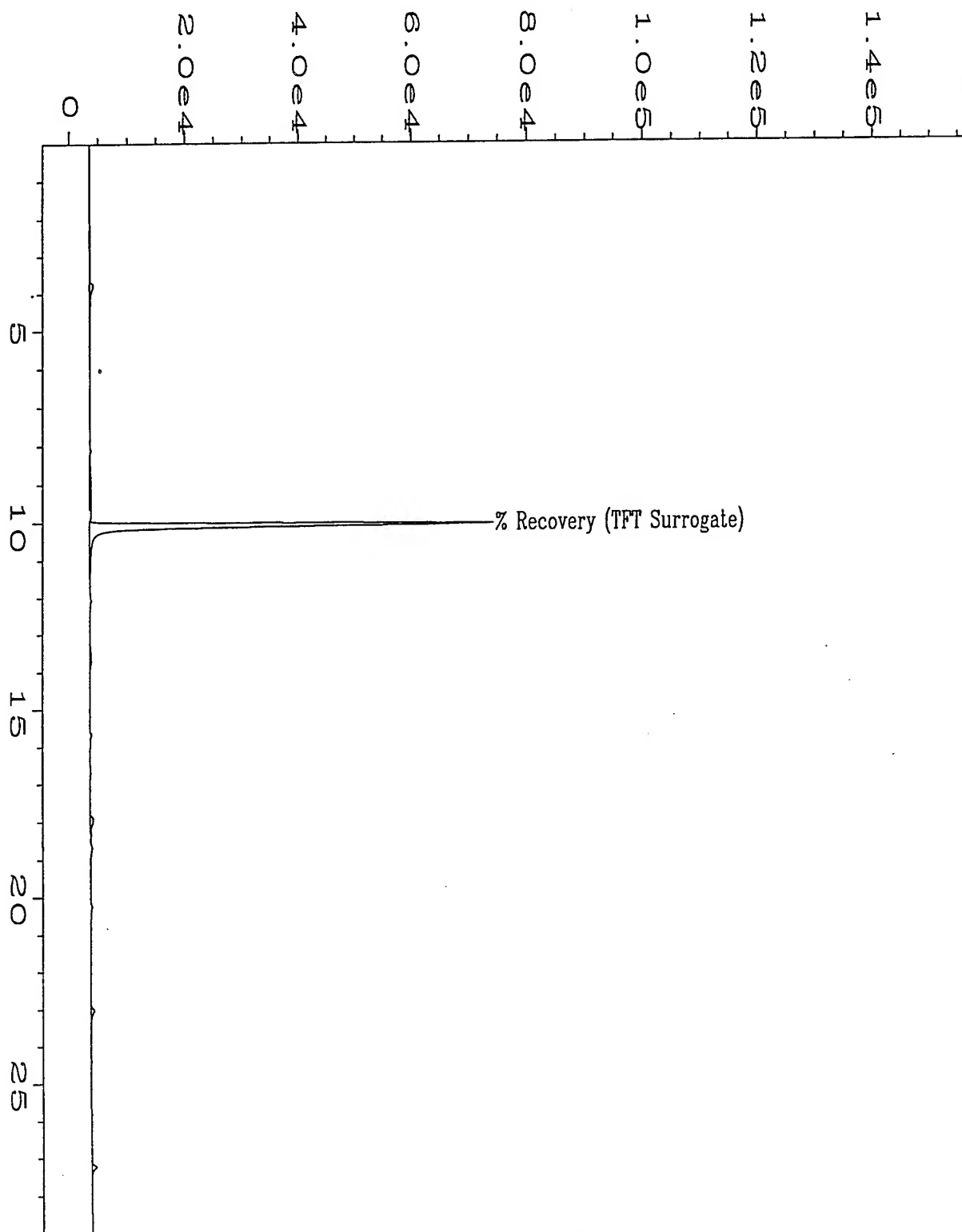
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\013F0901.D | Page Number        | : 1          |
| Operator           | : C.J. Cook                           | Vial Number        | : 13         |
| Instrument         | : BTEX1                               | Injection Number   | : 1          |
| Sample Name        | : X08735;1                            | Sequence Line      | : 9          |
| Run Time Bar Code: |                                       | Instrument Method: | TX10711.MT   |
| quired on          | : 11 Jul 95 07:12 PM                  | Analysis Method    | : TX10711.MT |
| Report Created on: | : 12 Jul 95 11:16 AM                  | Sample Amount      | : 0          |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |
| Sample Info        | : 95-2193;MW-16;5ml Water             |                    |              |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

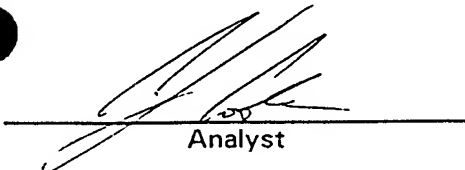
|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-17   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08736  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071114 |
|                      |           | Method Blank No.   | : MB1071195 |

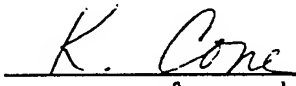
| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | 37                              | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 87%                             | 70%-130% (QC limits) |

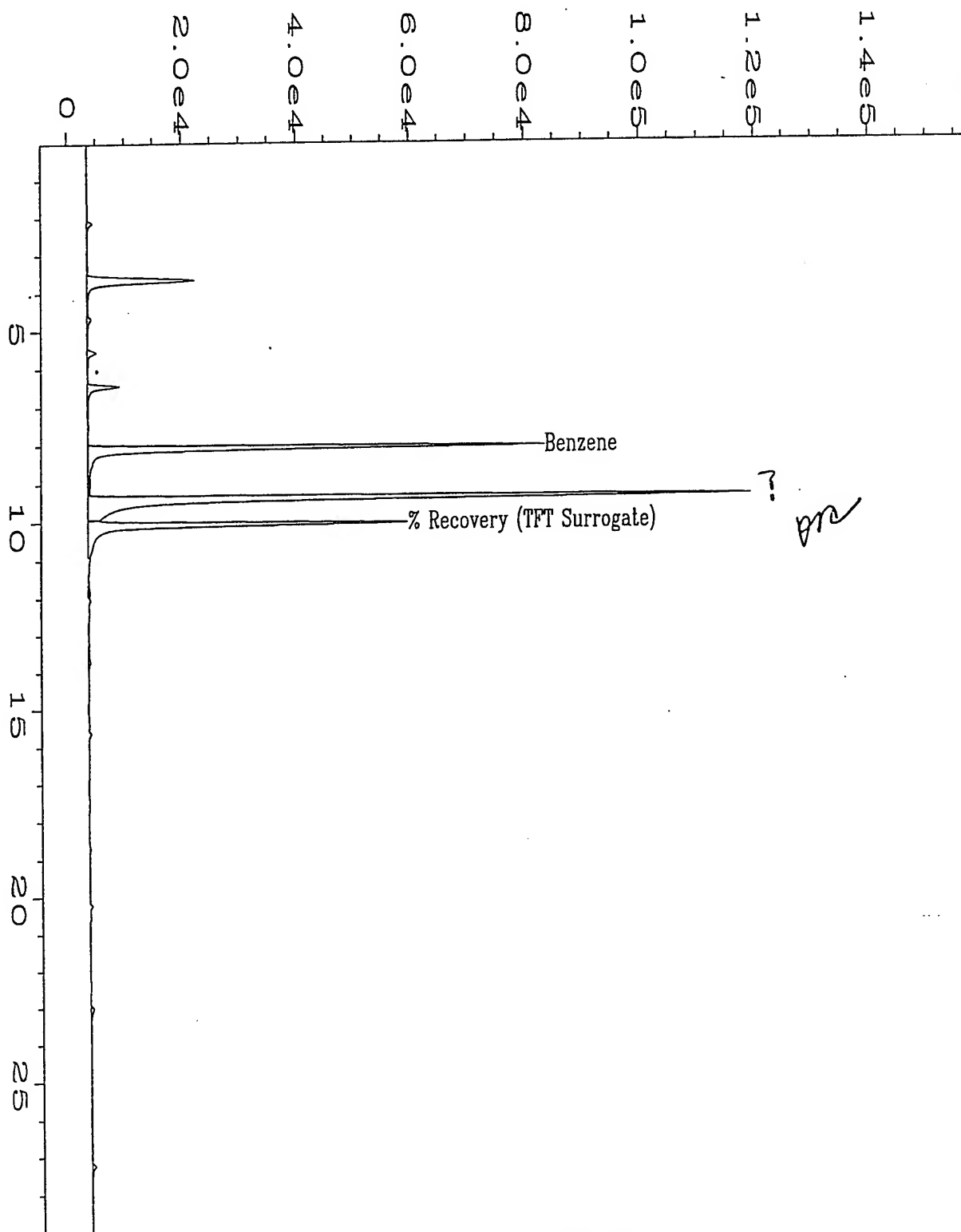
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\014F0901.D | Page Number       | : 1         |
| Operator           | : C.J. Cook                           | Vial Number       | : 14        |
| Instrument         | : BTEX1                               | Injection Number  | : 1         |
| Sample Name        | : X08736;1                            | Sequence Line     | : 9         |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.M |
| quired on          | : 11 Jul 95 07:53 PM                  | Analysis Method   | : BX10711.M |
| Report Created on: | : 12 Jul 95 11:16 AM                  | Sample Amount     | : 0         |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |
| Sample Info        | : 95-2193;MW-17;5ml Water             |                   |             |

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Method 602 Data Report

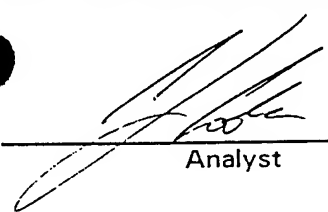
|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-15   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08737  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071115 |
|                      |           | Method Blank No.   | : MB1071195 |

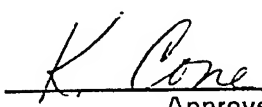
| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 86%                          | 70%-130% (QC limits) |

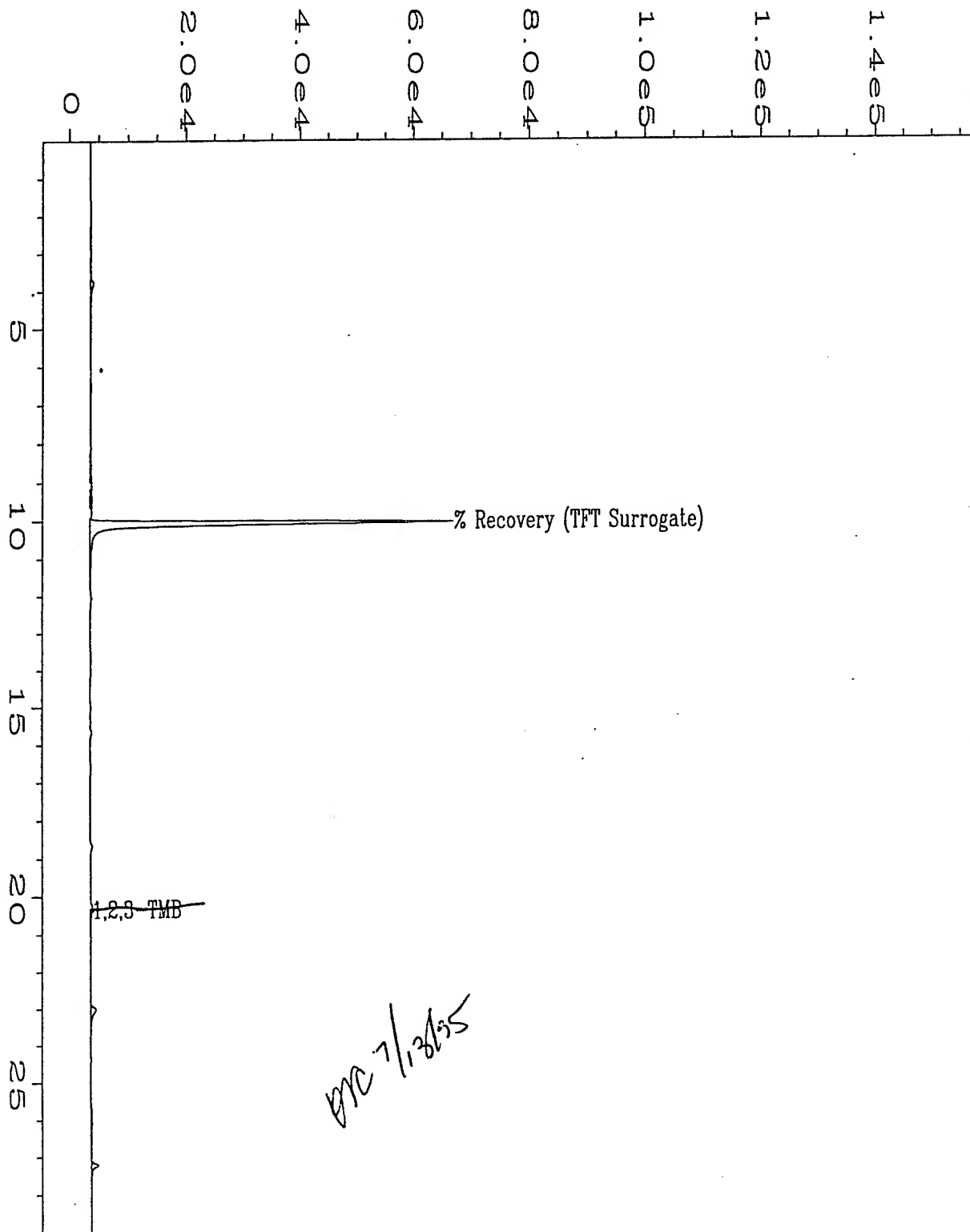
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
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|                    |                                       |                    |      |
|--------------------|---------------------------------------|--------------------|------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\015F0901.D | Page Number        | : 1  |
| Operator           | : C.J. Cook                           | Vial Number        | : 15 |
| Instrument         | : BTEX1                               | Injection Number   | : 1  |
| Sample Name        | : X08737;1                            | Sequence Line      | : 9  |
| Run Time Bar Code: |                                       | Instrument Method: | MT   |
| quired on          | : 11 Jul 95 08:35 PM                  | Analysis Method    | : MT |
| ort Created on:    | 12 Jul 95 11:16 AM                    | Sample Amount      | : 0  |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount        | :    |
| Multiplier         | : 1                                   |                    |      |
| Sample Info        | : 95-2193;MW-15;5ml Water             |                    |      |

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Method 602 Data Report

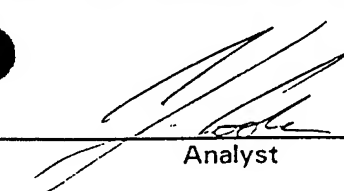
|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-14   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08738  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071116 |
|                      |           | Method Blank No.   | : MB1071195 |

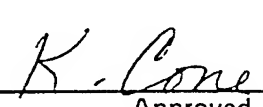
| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 87%                             | 70%-130% (QC limits) |

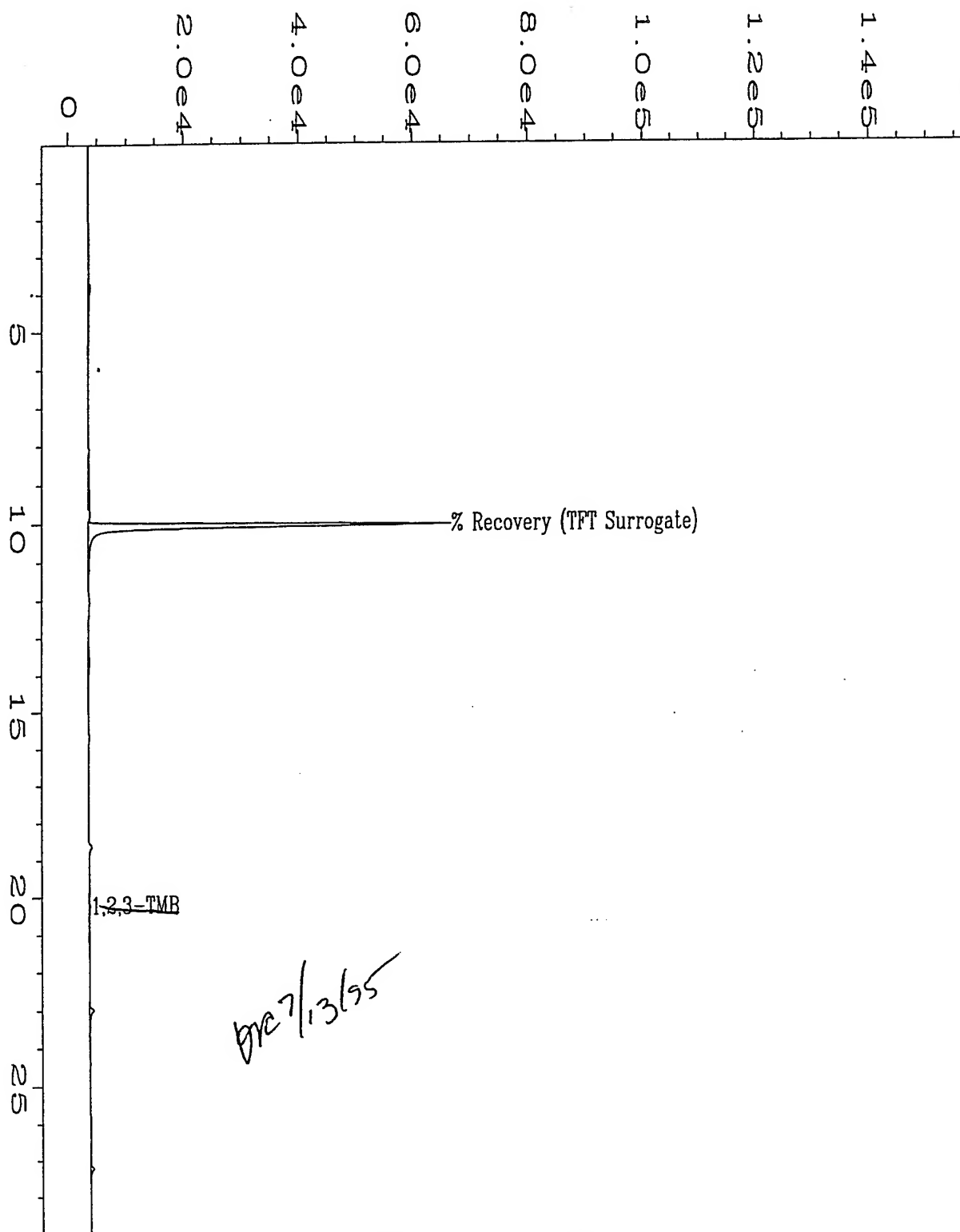
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
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|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\016F0901.D | Page Number       | : 1          |
| Operator           | : C.J. Cook                           | Vial Number       | : 16         |
| Instrument         | : BTEX1                               | Injection Number  | : 1          |
| Sample Name        | : X08738;1                            | Sequence Line     | : 9          |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.MT |
| quired on          | : 11 Jul 95 09:16 PM                  | Analysis Method   | : BX10711.MT |
| Report Created on: | : 12 Jul 95 11:16 AM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-14;5ml Water             |                   |              |

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Method 602 Data Report

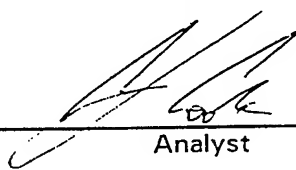
|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-19   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08739  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071117 |
|                      |           | Method Blank No.   | : MB1071195 |

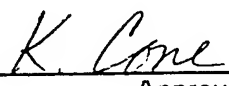
| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 94%                             | 70%-130% (QC limits) |

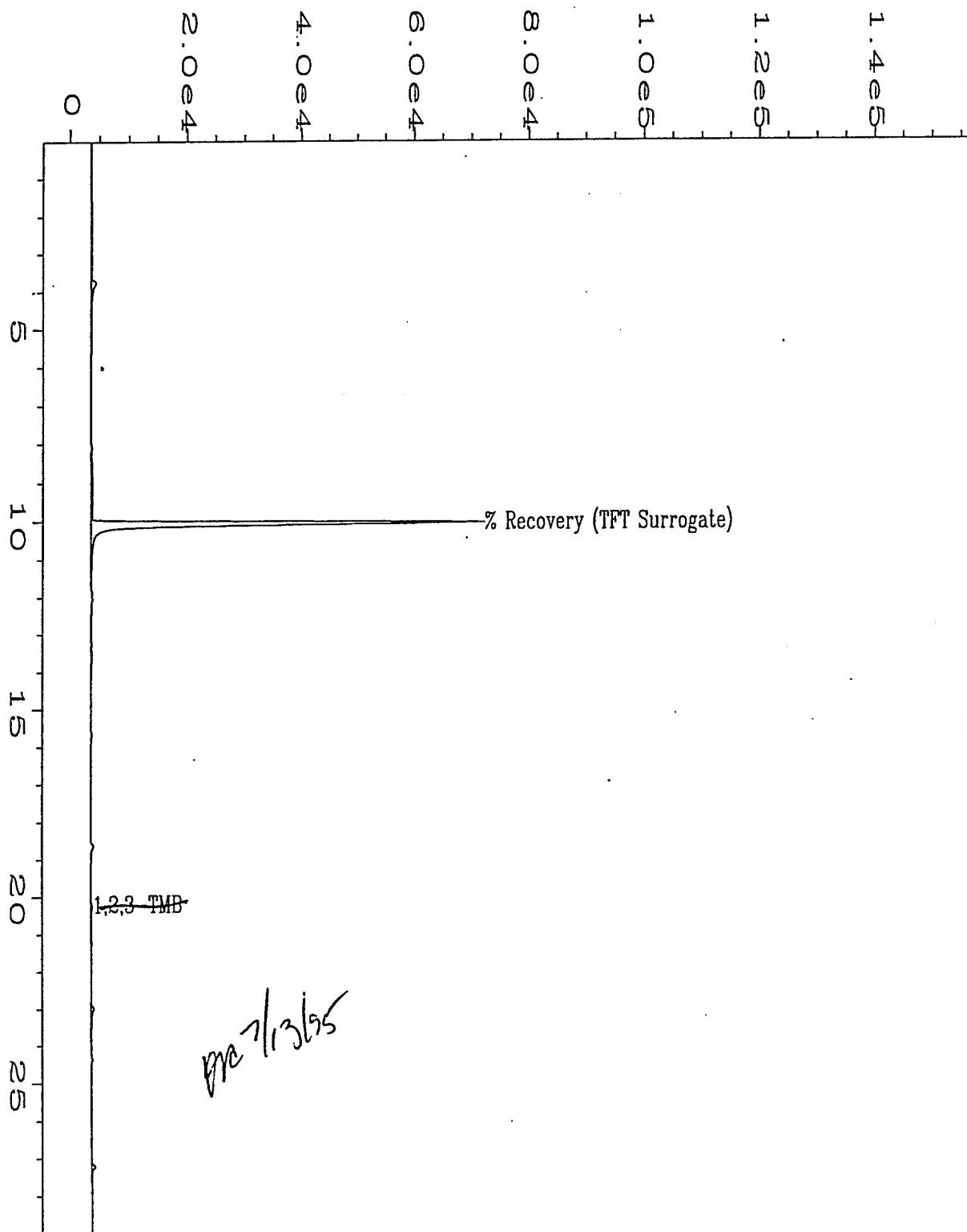
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\017F0901.D | Page Number       | : 1         |
| Operator           | : C.J. Cook                           | Vial Number       | : 17        |
| Instrument         | : BTEX1                               | Injection Number  | : 1         |
| Sample Name        | : X08739;1                            | Sequence Line     | : 9         |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.M |
| quired on          | : 11 Jul 95 09:58 PM                  | Analysis Method   | : BX10711.M |
| Report Created on: | : 12 Jul 95 11:16 AM                  | Sample Amount     | : 0         |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |
| Sample Info        | : 95-2193;MW-19;5ml Water             |                   |             |

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Method 602 Data Report

|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-18   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08740  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071118 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 1.0                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 83%                          | 70%-130% (QC limits) |

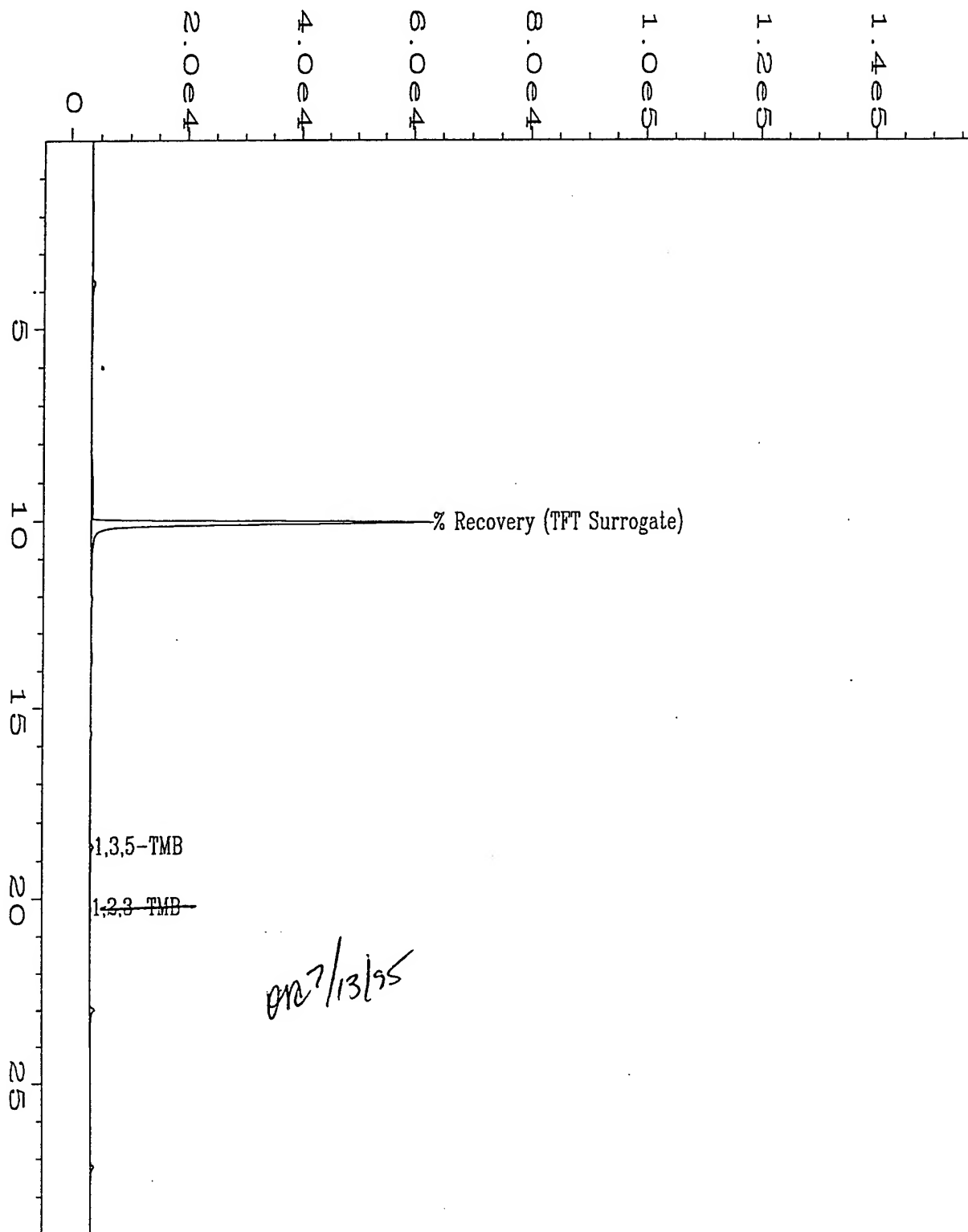
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\018F0901.D | Page Number       | : 1          |
| Operator           | : C.J. Cook                           | Vial Number       | : 18         |
| Instrument         | : BTEX1                               | Injection Number  | : 1          |
| Sample Name        | : X08740;1                            | Sequence Line     | : 9          |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.MT |
| quired on          | : 11 Jul 95 10:39 PM                  | Analysis Method   | : BX10711.MT |
| Report Created on: | : 12 Jul 95 11:16 AM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-18;5ml Water             |                   |              |

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Method 602 Data Report

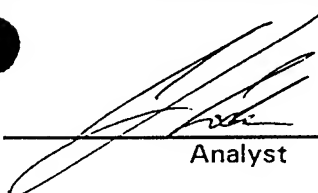
|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-20   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08741  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/12/95 | Lab File No.       | : BX1071120 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample Concentration ug/L | RL ug/L              |
|---|-----------------------------------|---------------------------|----------------------|
| Benzene   | 71-43-2                           | U                         | 0.4                  |
| Toluene   | 108-88-3                          | 1.1                       | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                         | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                         | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                         | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                         | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                         | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                         | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                         | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 80%                       | 70%-130% (QC limits) |

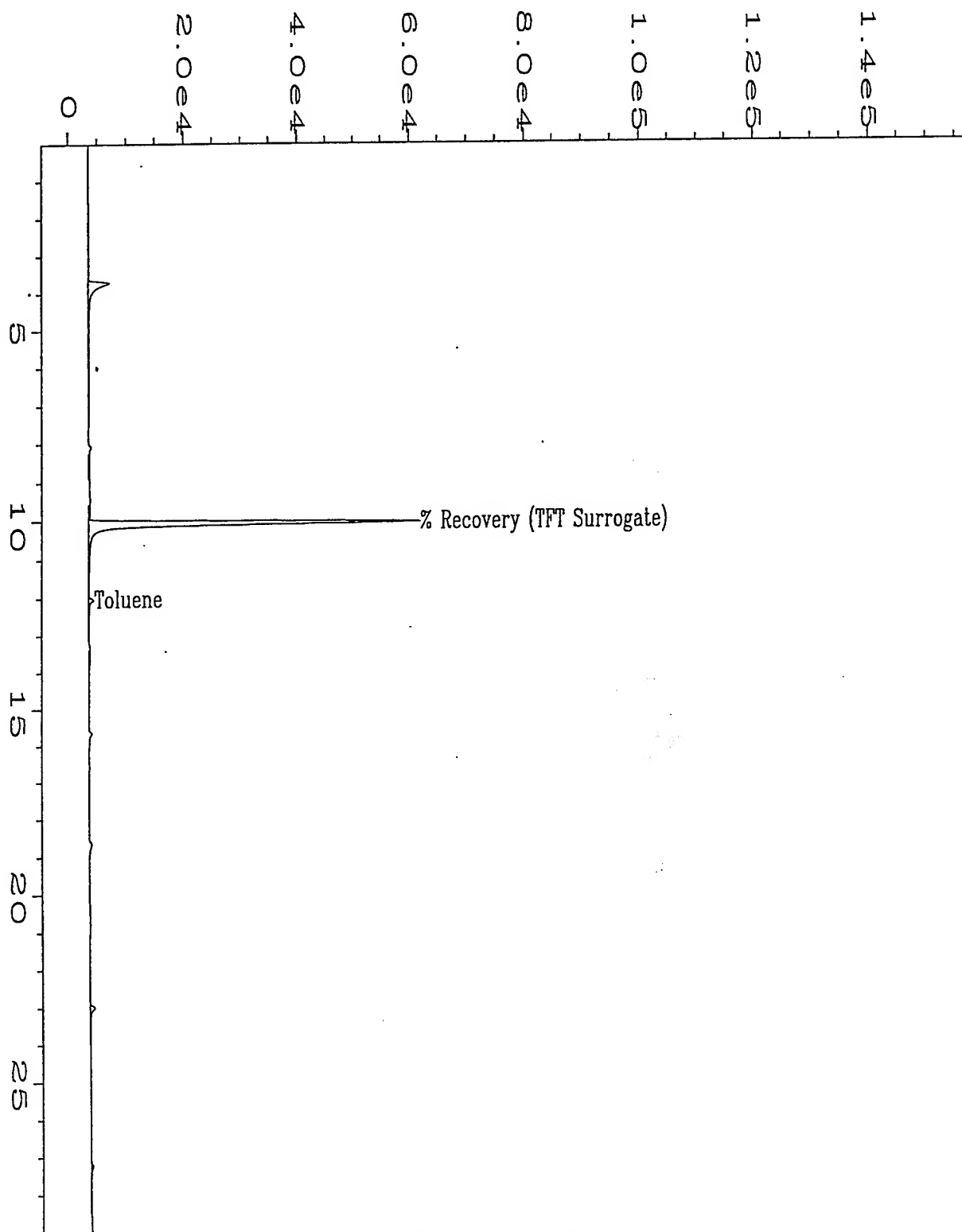
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
\_\_\_\_\_  
Analyst

  
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Approved



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|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\020F0901.D | Page Number       | : 1          |
| Operator           | : C.J. Cook                           | Vial Number       | : 20         |
| Instrument         | : BTEX1                               | Injection Number  | : 1          |
| Sample Name        | : X08741;1                            | Sequence Line     | : 9          |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.MT |
| quired on          | : 12 Jul 95 00:02 AM                  | Analysis Method   | : BX10711.MT |
| port Created on:   | : 12 Jul 95 11:17 AM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-20;5ml Water             |                   |              |

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Method 602 Data Report

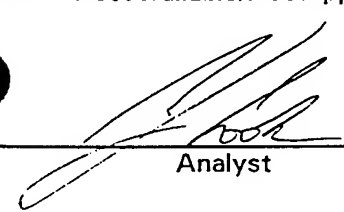
|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-21   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08742  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/12/95 | Lab File No.       | : BX1071121 |
|                      |           | Method Blank No.   | : MB1071195 |

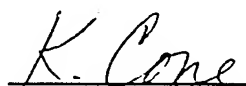
| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | 0.8                          | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 1.1                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 84%                          | 70%-130% (QC limits) |

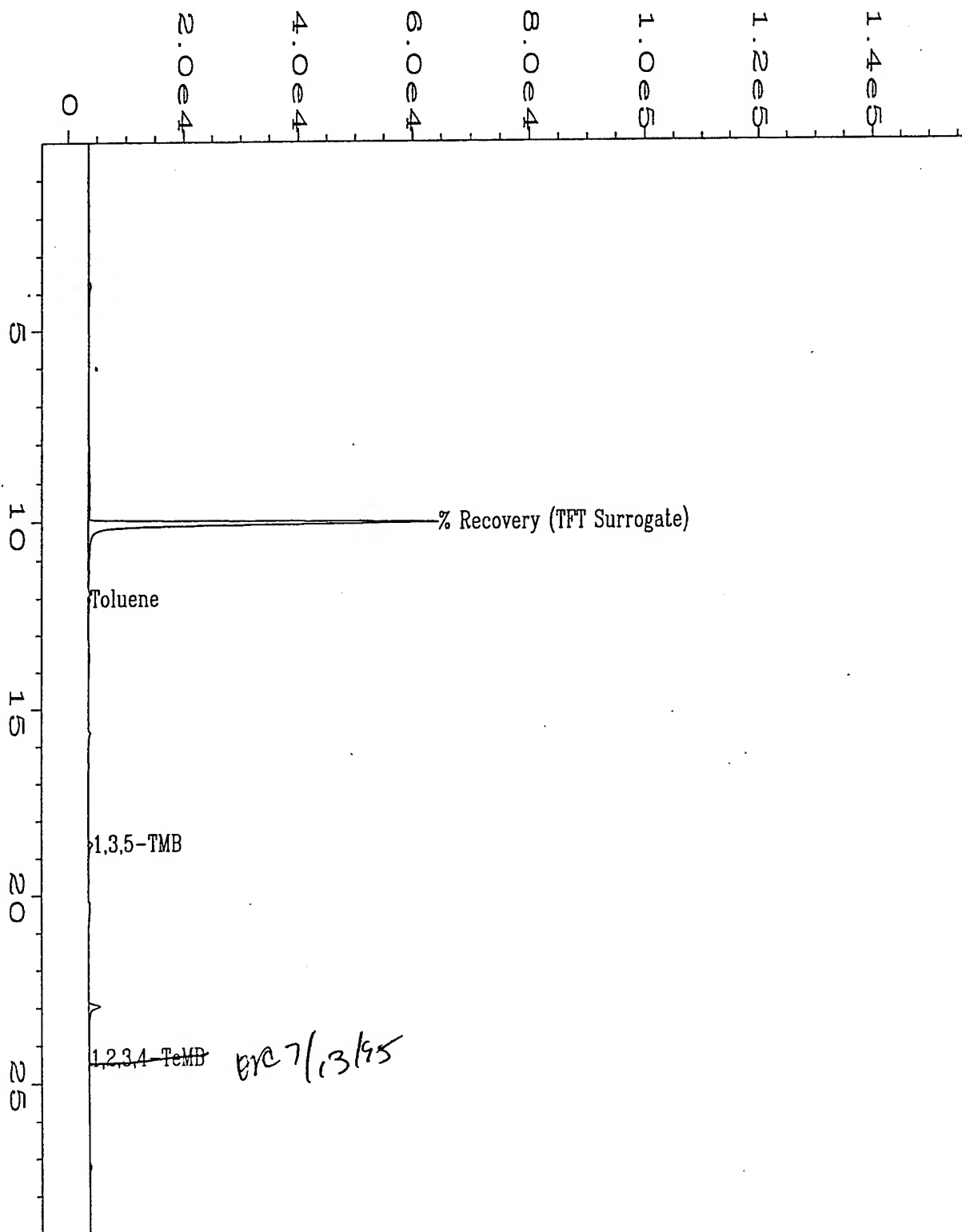
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
\_\_\_\_\_  
Analyst

  
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Approved



|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\021F0901.D | Page Number       | : 1         |
| Operator           | : C.J. Cook                           | Vial Number       | : 21        |
| Instrument         | : BTEX1                               | Injection Number  | : 1         |
| Sample Name        | : X08742;1                            | Sequence Line     | : 9         |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.M |
| quired on          | : 12 Jul 95 00:44 AM                  | Analysis Method   | : BX10711.M |
| Report Created on: | 12 Jul 95 11:17 AM                    | Sample Amount     | : 0         |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |
| Sample Info        | : 95-2193;MW-21;5ml Water             |                   |             |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

Client Sample Number : Trip Blank  
Lab Sample Number : X08743  
Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Prepared : 7/11/95  
Date Analyzed : 7/12/95

Client Project No. : 722450.26  
Lab Project No. : 95-2193  
Dilution Factor : 1.00  
Method : 602  
Matrix : Water  
Lab File No. : BX1071123  
Method Blank No. : MB1071195

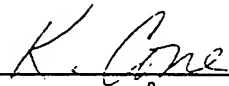
| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 72%                          | 70%-130% (QC limits) |

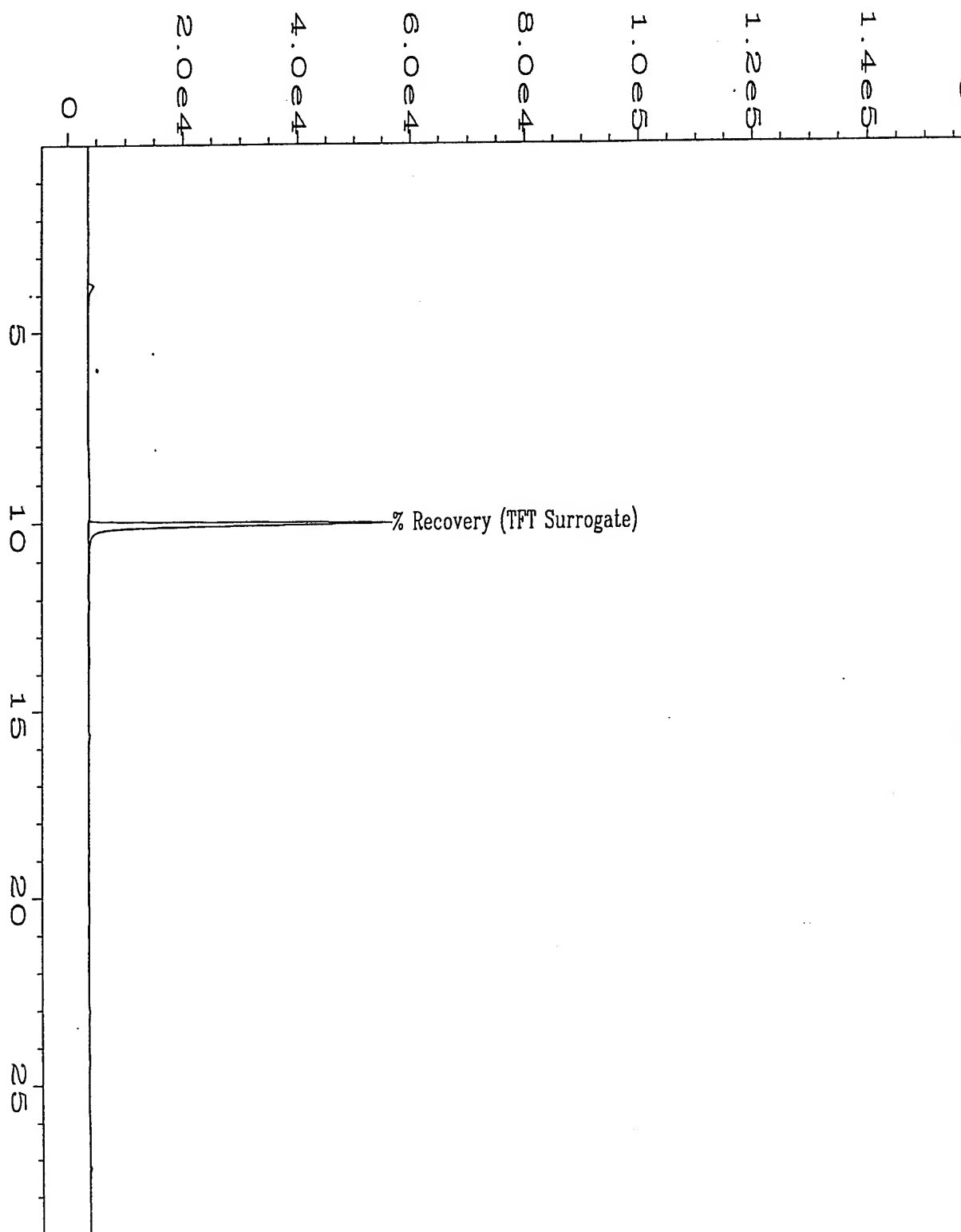
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10711\023F0901.D | Page Number       | : 1         |
| Operator           | : C.J. Cook                           | Vial Number       | : 23        |
| Instrument         | : BTEX1                               | Injection Number  | : 1         |
| Sample Name        | : X08743;1                            | Sequence Line     | : 9         |
| Run Time Bar Code: |                                       | Instrument Method | : BX10711.M |
| quired on          | : 12 Jul 95 02:06 AM                  | Analysis Method   | : BX10711.M |
| Report Created on: | : 12 Jul 95 11:17 AM                  | Sample Amount     | : 0         |
| Last Recalib on    | : 12 JUL 95 08:44 AM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |
| Sample Info        | : 95-2193;Trip Blank;5ml Water        |                   |             |

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

EPA 602/8020 Matrix Spike/Matrix Spike Duplicate Data Report

|                   |           |                    |                |
|-------------------|-----------|--------------------|----------------|
| Client Sample No. | : MW-21   | Client Project No. | : 722450.26    |
| Lab Sample No.    | : X08742  | Lab Project No.    | : 95-2193      |
| Date Sampled      | : 7/10/95 | EPA Method No.     | : 602          |
| Date Received     | : 7/11/95 | Matrix             | : Water        |
| Date Prepared     | : 6/12/95 | Lab File Number(s) | : BX1071211,12 |
| Date Analyzed     | : 6/12/95 | Method Blank       | : MB1071295    |
|                   |           | Dilution Factor    | : 1            |

| Compound      | Spike Added (ug/L) | Sample Concentration (ug/L) | Concentration (ug/L) |      | Comments   |
|---------------|--------------------|-----------------------------|----------------------|------|------------|
|               |                    |                             | MS                   | MSD  |            |
| Benzene       | 20.0               | 0.0                         | 14.2                 | 14.7 |            |
| Toluene       | 20.0               | 0.8                         | 14.3                 | 14.8 |            |
| Chlorobenzene | 20.0               | 0.0                         | 13.8                 | 14.4 |            |
| Ethylbenzene  | 20.0               | 0.0                         | 14.0                 | 14.6 |            |
| m,p-Xylene    | 40.0               | 0.0                         | 28.5                 | 30.0 |            |
| o-Xylene      | 20.0               | 0.0                         | 14.2                 | 14.8 |            |
| 1,3,5-TMB     | 20.0               | 1.1                         | 13.7                 | 14.2 | B          |
| 1,2,4-TMB     | 20.0               | 0.0                         | 13.4                 | 14.0 |            |
| 1,2,3-TMB     | 20.0               | 0.0                         | 13.7                 | 14.4 |            |
| 1,2,3,4-TeMB  | 20.0               | 0.0                         | 12.8                 | 13.5 |            |
| Surrogate     | 100.0              | 84%                         | 84%                  | 78%  | % RECOVERY |

| Compound      |  | MS % RECOVERY | MSD % RECOVERY | RPD | QC# Limits |      |       |
|---------------|--|---------------|----------------|-----|------------|------|-------|
|               |  |               |                |     | RPD        | %REC |       |
| Benzene       |  | 71.0          | 73.5           | 3.5 | 25         | 50   | - 150 |
| Toluene       |  | 67.5          | 70.0           | 3.6 | 25         | 50   | - 148 |
| Chlorobenzene |  | 69.0          | 72.0           | 4.3 | 25         | 55   | - 135 |
| Ethylbenzene  |  | 70.0          | 73.0           | 4.2 | 25         | 50   | - 150 |
| m,p-Xylene    |  | 71.3          | 75.0           | 5.1 | 25         | 50   | - 150 |
| o-Xylene      |  | 71.0          | 74.0           | 4.1 | 25         | 50   | - 150 |
| 1,3,5-TMB     |  | 63.0          | 65.5           | 3.9 | 25         | 50   | - 150 |
| 1,2,4-TMB     |  | 67.0          | 70.0           | 4.4 | 25         | 50   | - 150 |
| 1,2,3-TMB     |  | 68.5          | 72.0           | 5.0 | 25         | 50   | - 150 |
| 1,2,3,4-TeMB  |  | 64.0          | 67.5           | 5.3 | 25         | 50   | - 150 |
| Surrogate     |  | 84.0          | 78.0           | NA  | NA         | 70   | - 130 |

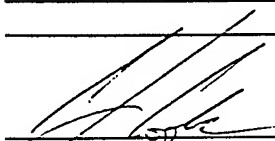
# = Values taken from EPA methods 602/8020.


\* = Values outside of QC limits.

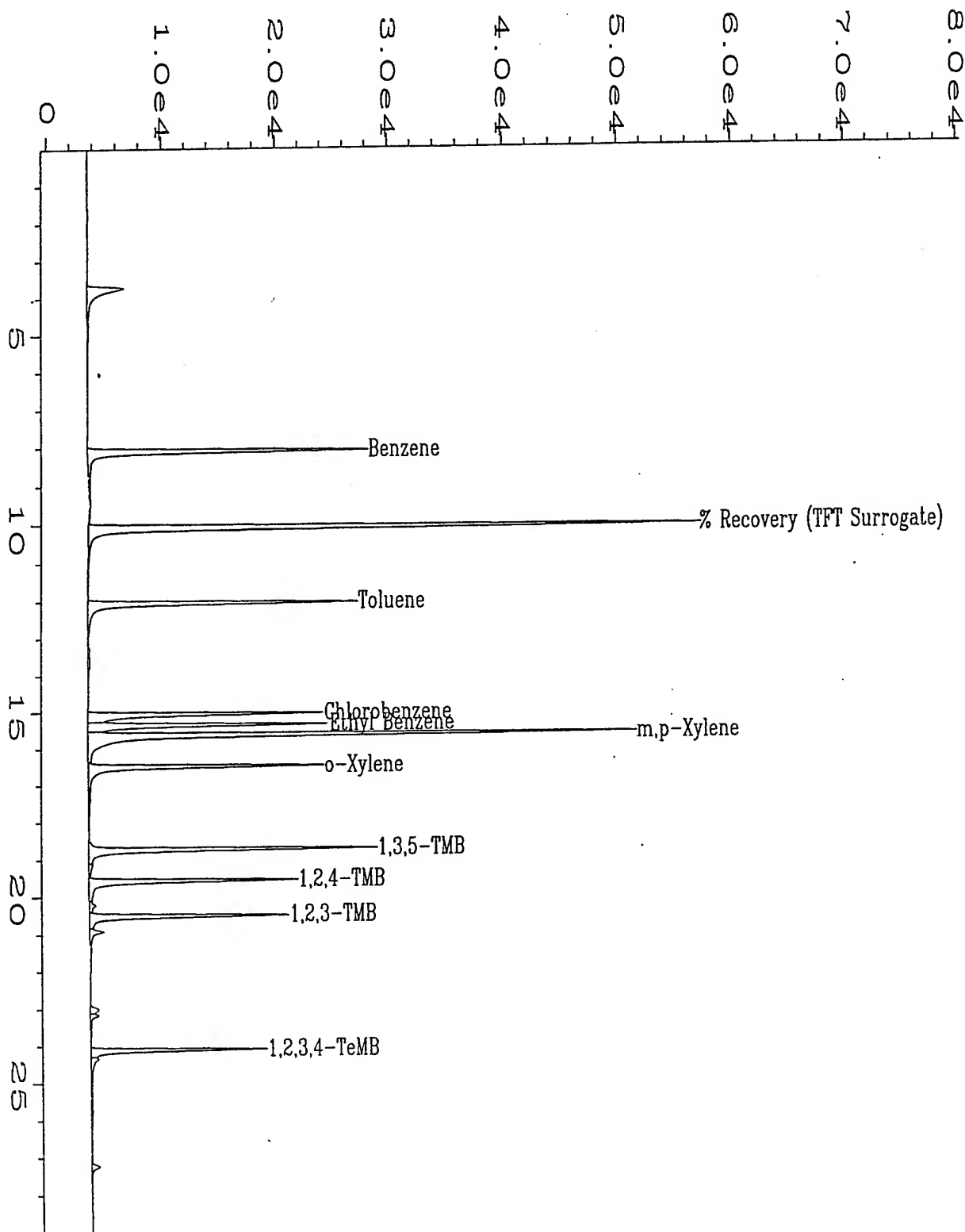
RPD: 0 out of (10) outside limits.

Spike Recovery: 0 out of (20) outside limits.

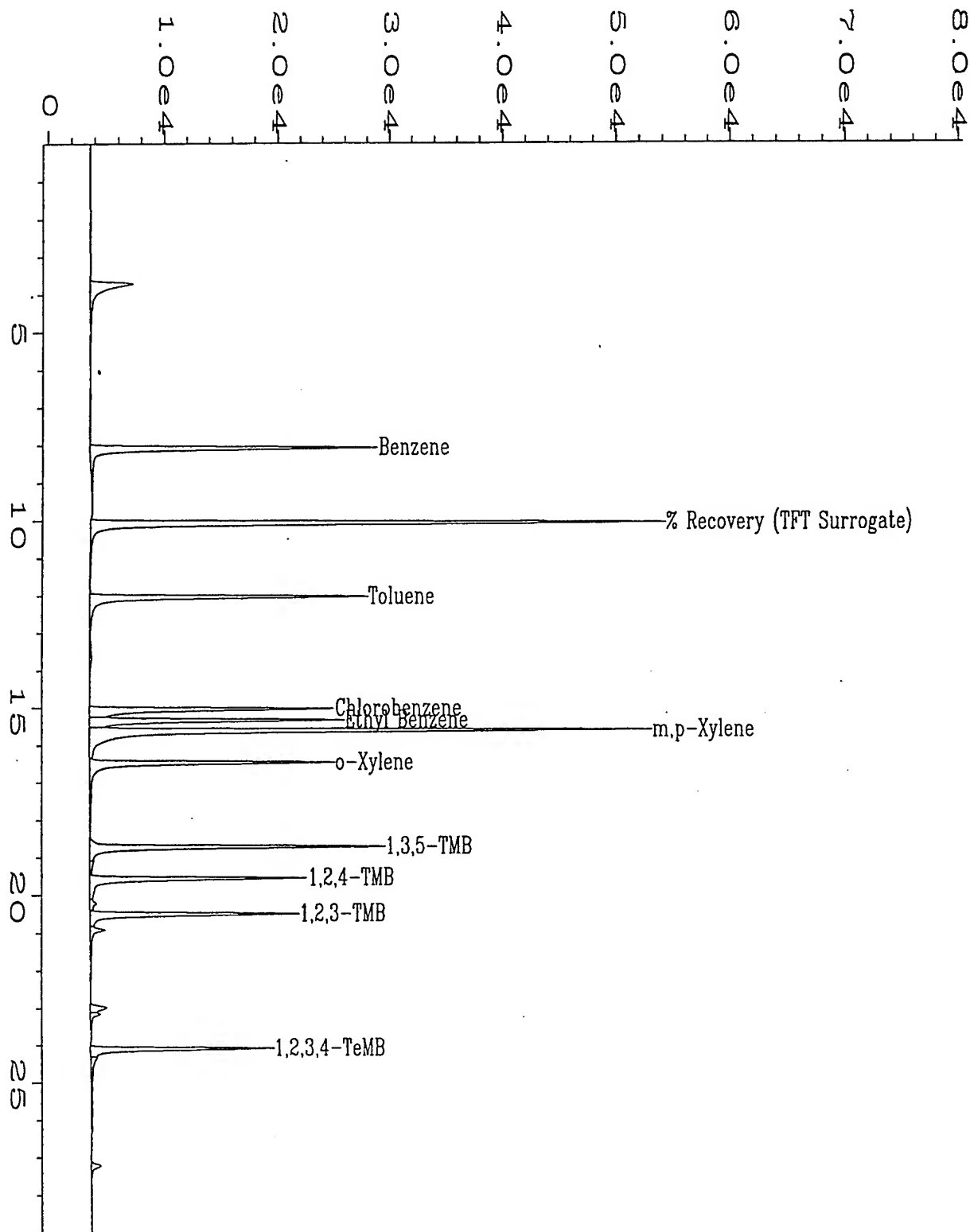
Comments:

  
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Analyst

  
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Approved



|                      |   |                   |              |
|----------------------|---|-------------------|--------------|
| Data File Name       | : C:\HPCHEM\1\DATA\BX10712\011F0801.D       | Page Number       | : 1          |
| Operator             | : C.J. Cook                                 | Vial Number       | : 11         |
| Instrument           | : BTEX1                                     | Injection Number  | : 1          |
| Sample Name          | : X08742MS;1                                | Sequence Line     | : 8          |
| Print Time Bar Code: |   | Instrument Method | : BX10712.MT |
| Printed on           | : 12 Jul 95 06:34 PM                        | Analysis Method   | : BX10712.MT |
| Report Created on:   | : 13 Jul 95 09:46 AM                        | Sample Amount     | : 0          |
| Last Recalib on      | : 12 JUL 95 04:18 PM                        | ISTD Amount       | :            |
| Multiplier           | : 1   |                   |              |
| Sample Info          | : 95-2193;MW-21;5ml Water + 20ppb BTEX Std. |                   |              |



|                    |   |                   |               |
|--------------------|---|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10712\012F0801.D       | Page Number       | : 1           |
| Operator           | : C.J. Cook                                 | Vial Number       | : 12          |
| Instrument         | : BTEX1                                     | Injection Number  | : 1           |
| Sample Name        | : X08742MSD;1                               | Sequence Line     | : 8           |
| Run Time Bar Code: |   | Instrument Method | : BX10712.MTH |
| Required on        | : 12 Jul 95 07:16 PM                        | Analysis Method   | : BX10712.MTH |
| Report Created on  | : 13 Jul 95 09:46 AM                        | Sample Amount     | : 0           |
| Last Recalib on    | : 12 JUL 95 04:18 PM                        | ISTD Amount       | :             |
| Multiplier         | : 1   |                   |               |
| Sample Info        | : 95-2193;MW-21;5ml Water + 20ppb BTEX Std. |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St.  
Wheat Ridge, CO 80033  
(303) 425-6021

EPA 602/8020 Data Report  
Laboratory Control Sample (LCS)

LCS Number : LCS1071195  
Date Extracted/Prepared : 7/11/95  
Date Analyzed : 7/11/95  
Spike Amount (ug/L) : 20.0

Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX1071111

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 17.7                   | 88.5                 | 68-111*             |
| Toluene   | 108-88-3   | 18.5                   | 92.5                 | 71-111*             |
| Chlorobenzene   | 108-90-7   | 18.6                   | 93.0                 | 65-115*             |
| Ethyl Benzene   | 100-41-4   | 18.7                   | 93.5                 | 75-115*             |
| m,p-Xylene  | 108-38-3   | 19.9                   | 99.5                 | 74-113*             |
| o-Xylene  | 106-42-3   | 18.5                   | 92.5                 | 65-115*             |
| 1,3,5-Trimethylbenzene  | 95-47-6    | 18.6                   | 93.0                 | 69-105*             |
| 1,2,4-Trimethylbenzene  | 108-67-8   | 18.1                   | 90.5                 | 68-110*             |
| 1,2,3-Trimethylbenzene  | 95-63-6    | 22.4                   | 112.0                | 71-127*             |
| 1,2,3,4-Tetramethylbenzene                                      | 526-73-8   | 18.4                   | 92.0                 | 65-115*             |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 99%                    | 70%-130% (QC limits) |                     |

NOTES:

\* = Limits established 7/5/95 KSC

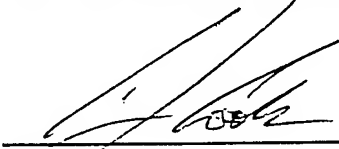
QUALIFIERS:

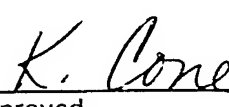
E = Extrapolated value. Value exceeds that of the calibration range.

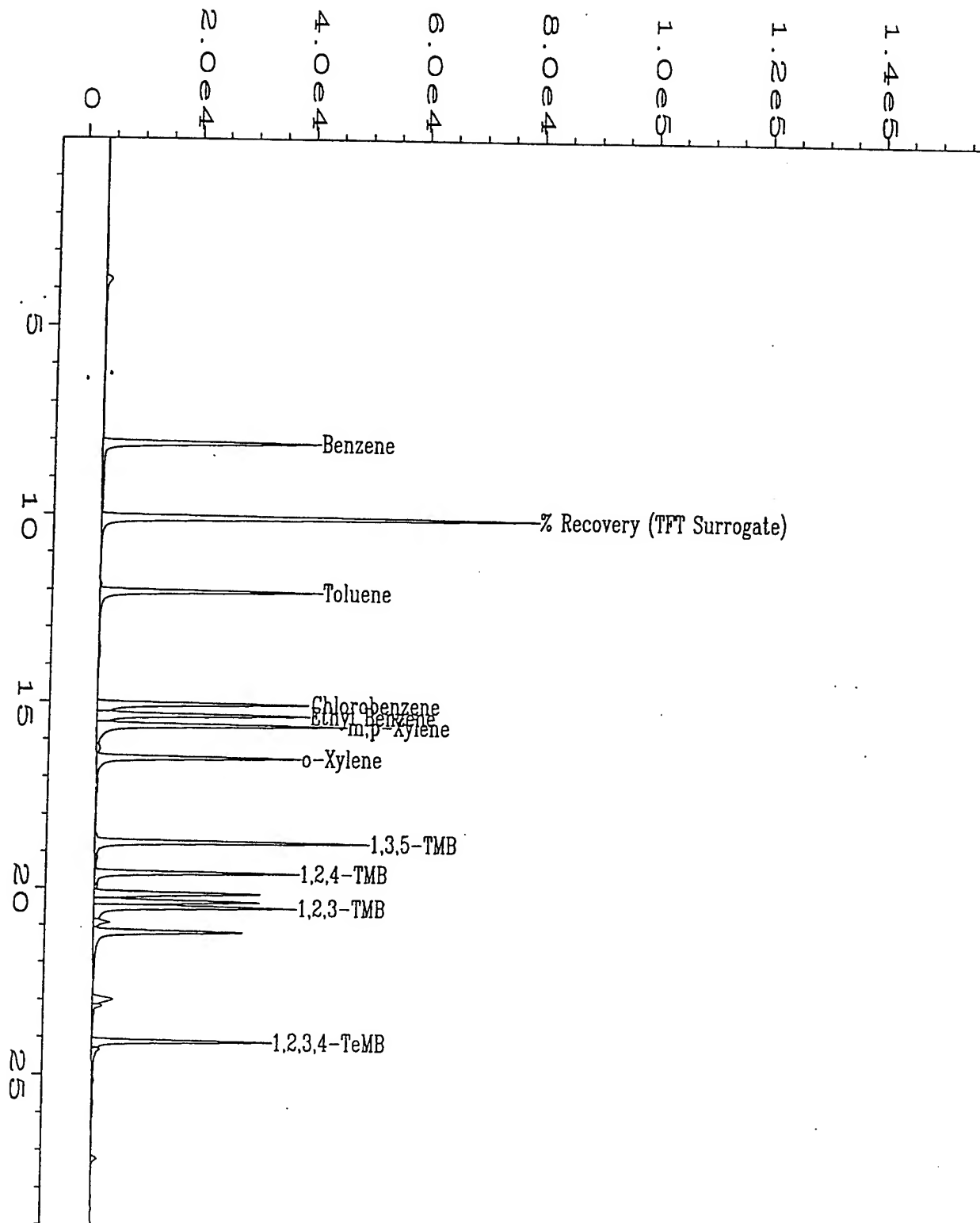
U = Compound analyzed for, but not detected.

B = Compound found in blank and sample. Compare blank and sample data.

NA = Not available/Not analyzed.

  
Analyst

  
Approved



Data File Name : C:\HPCHEM\1\DATA\BX10711\011F0901.D

Operator : C.J. Cook

Instrument : BTEX1

Sample Name : LCS1071195

Run Time Bar Code:

Required on : 11 Jul 95 05:49 PM

Report Created on: 12 Jul 95 10:58 AM

Last Recalib on : 12 JUL 95 08:44 AM

Multiplier : 1.

Page Number : 1

Vial Number : 11

Injection Number : 1

Sequence Line : 9

Instrument Method: BX10711.MTH

Analysis Method : BX10711.MTH

Sample Amount : 0

ISTD Amount :

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St.  
Wheat Ridge, CO 80033  
(303) 425-6021

EPA 602/8020 Data Report  
Laboratory Control Sample (LCS)

LCS Number : LCS1071295  
Date Extracted/Prepared : 7/12/95  
Date Analyzed : 7/12/95  
Spike Amount (ug/L) : 20.0

Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX1071208

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 18.4                   | 92.0                 | 68-111*             |
| Toluene   | 108-88-3   | 18.8                   | 94.0                 | 71-111*             |
| Chlorobenzene   | 108-90-7   | 19.4                   | 97.0                 | 65-115*             |
| Ethyl Benzene   | 100-41-4   | 19.3                   | 96.5                 | 75-115*             |
| m,p-Xylene  | 108-38-3   | 20.0                   | 100.0                | 74-113*             |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 18.7                   | 93.5                 | 65-115*             |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 19.8                   | 99.0                 | 69-109*             |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 19.4                   | 97.0                 | 68-110*             |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 24.7                   | 123.5                | 71-127*             |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 20.1                   | 100.5                | 65-115*             |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 89%                    | 70%-130% (QC limits) |                     |

NOTES:

\* = Limits established 7/5/95 KSC

QUALIFIERS:

E = Extrapolated value. Value exceeds that of the calibration range.

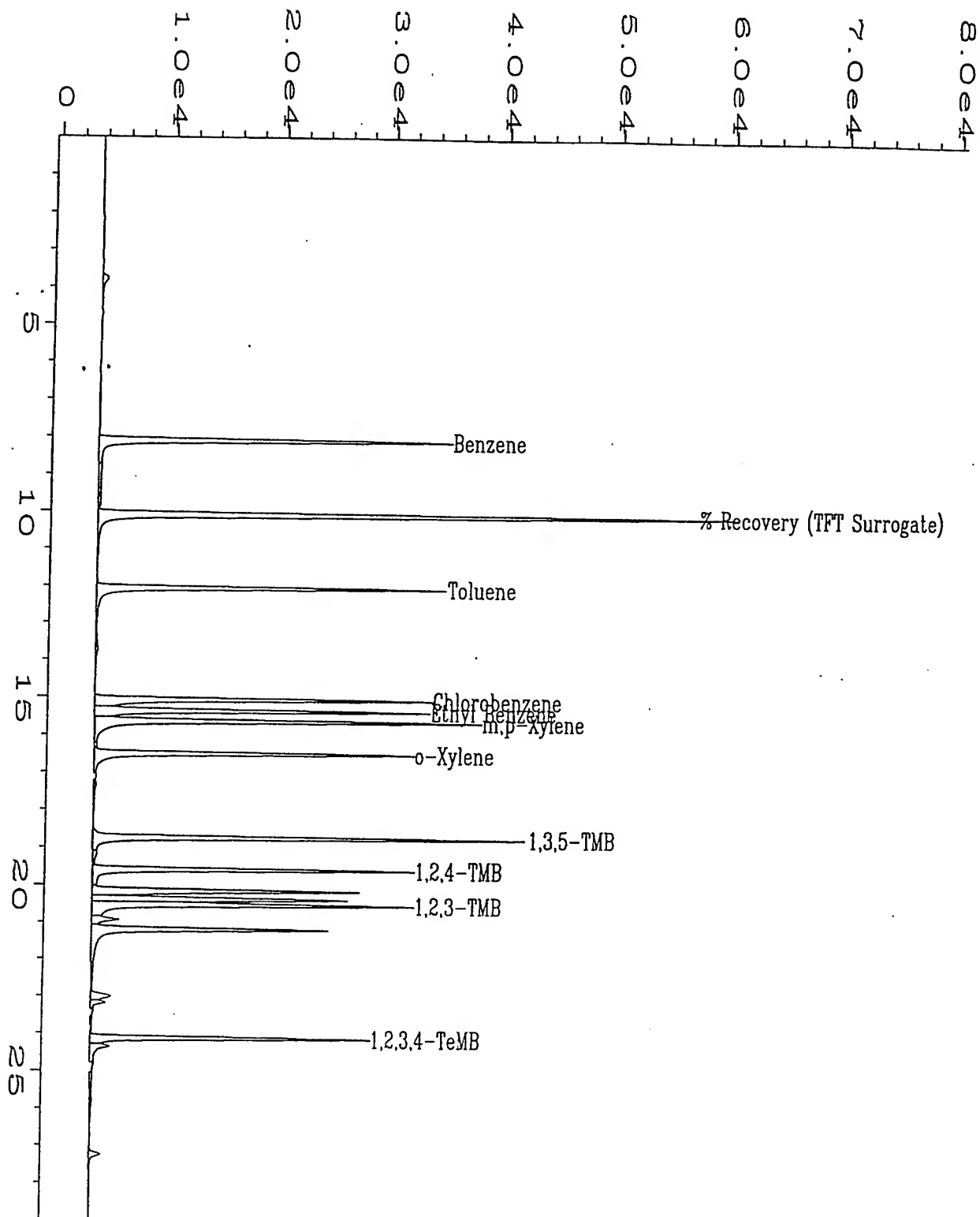
U = Compound analyzed for, but not detected.

B = Compound found in blank and sample. Compare blank and sample data.

NA = Not available/Not analyzed.

Analyst

Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10712\008F0801.D | Page Number        | : 1           |
| Operator           | : C.J. Cook                           | Vial Number        | : 8           |
| Instrument         | : BTEX1                               | Injection Number   | : 1           |
| Sample Name        | : LCS1071295                          | Sequence Line      | : 8           |
| Run Time Bar Code: |                                       | Instrument Method: | BX10712.MTH   |
| Required on        | : 12 Jul 95 04:30 PM                  | Analysis Method    | : BX10712.MTH |
| Report Created on: | 13 Jul 95 09:45 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 12 JUL 95 04:18 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH-GASOLINE)

|               |           |                       |                          |
|---------------|-----------|-----------------------|--------------------------|
| Date Sampled  | : 7/10/95 | Client Project Number | : 722450.26              |
| Date Received | : 7/11/95 | Lab Project Number    | : 95-2193                |
| Date Prepared | : 7/12/95 | Matrix                | : Water                  |
|               |           | Method Number         | : EPA 5030/8015 Modified |

| Evergreen<br>Sample # | Client<br>Sample # | Analysis<br>Date | Surrogate<br>Recovery | Result<br>mg/L | RL<br>mg/L |
|-----------------------|--------------------|------------------|-----------------------|----------------|------------|
| MB071195              | METHOD BLANK       | 7/12/95          | 100%                  | U              | 0.1        |
| X08741                | MW-20              | 7/12/95          | 102%                  | U              | 0.1        |
| X08735                | MW-16              | 7/12/95          | 103%                  | U              | 0.1        |
| X08736                | MW-17              | 7/12/95          | 102%                  | 0.1            | 0.1        |
| X08737                | MW-15              | 7/12/95          | 102%                  | U              | 0.1        |
| X08738                | MW-14              | 7/12/95          | 101%                  | U              | 0.1        |
| X08739                | MW-19              | 7/12/95          | 101%                  | U              | 0.1        |
| X08740                | MW-18              | 7/12/95          | 99%                   | U              | 0.1        |

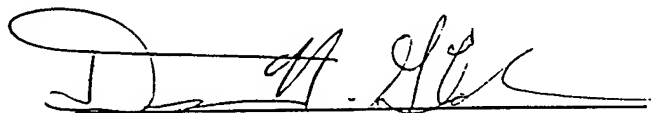
QUALIFIERS

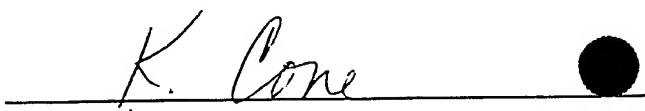
U = TVH analyzed for but not detected.

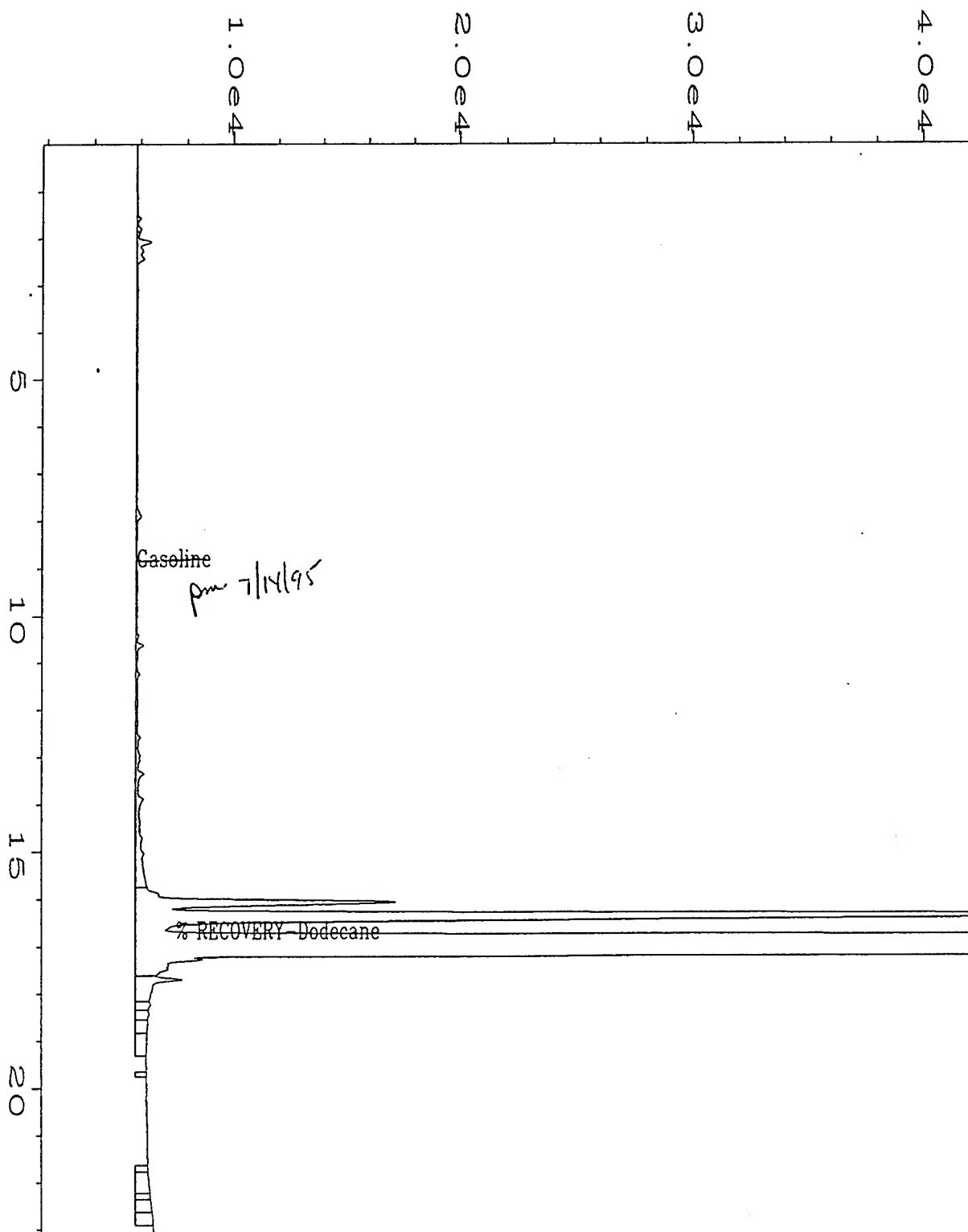
B = TVH found in blank also.

E = Extrapolated value. Exceeds calibration range.

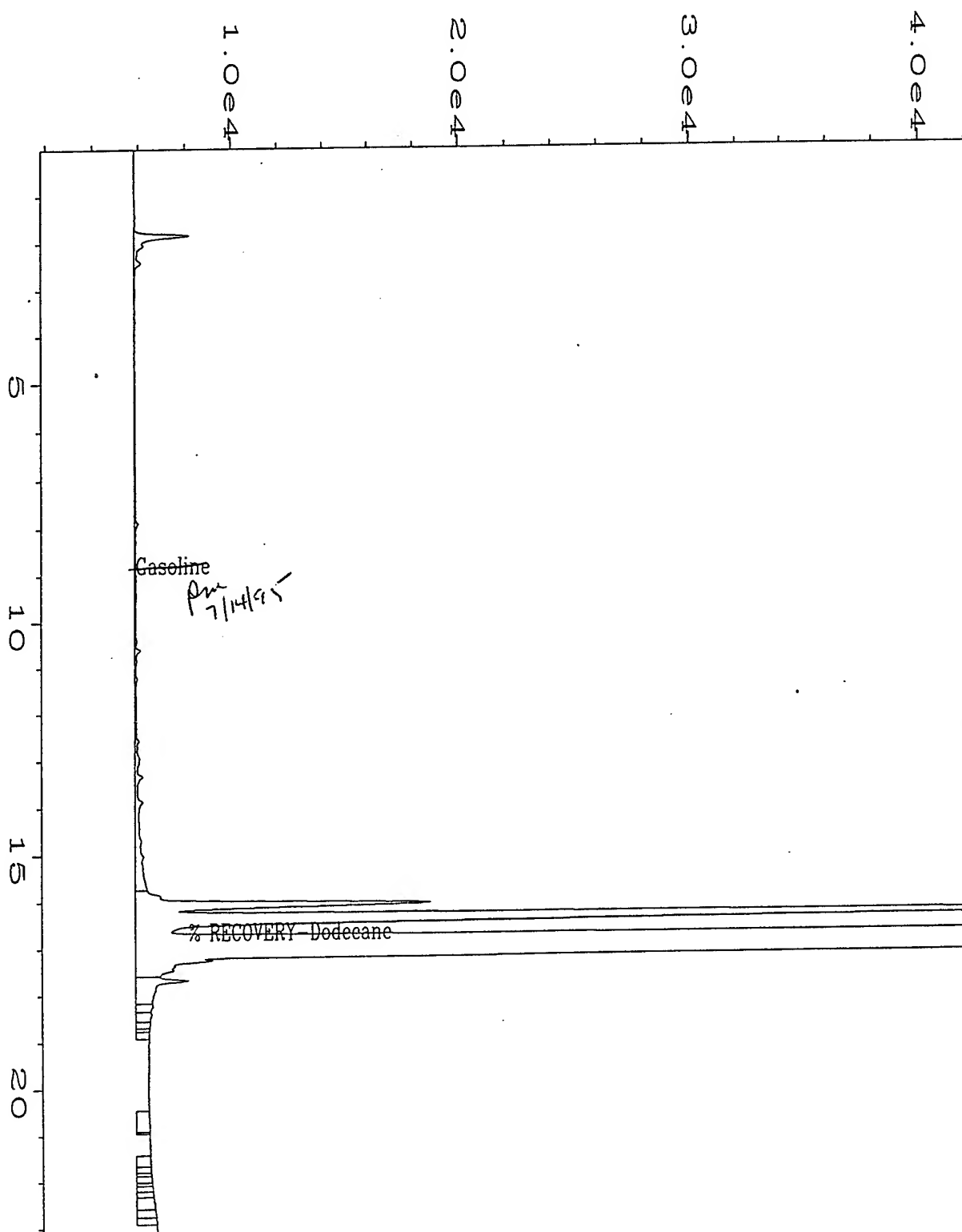
RL = Reporting Limit.

  
Analyst

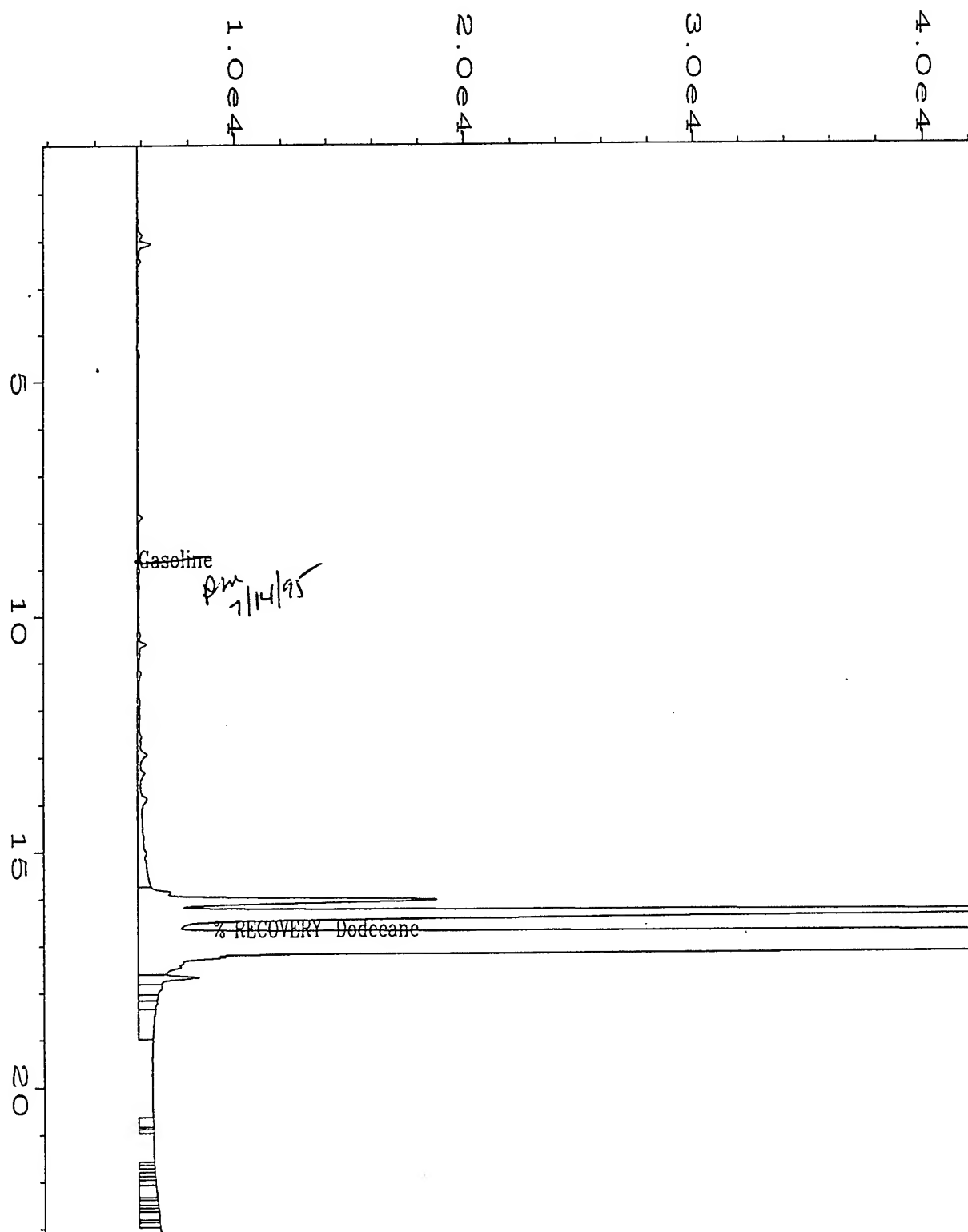
  
Approved



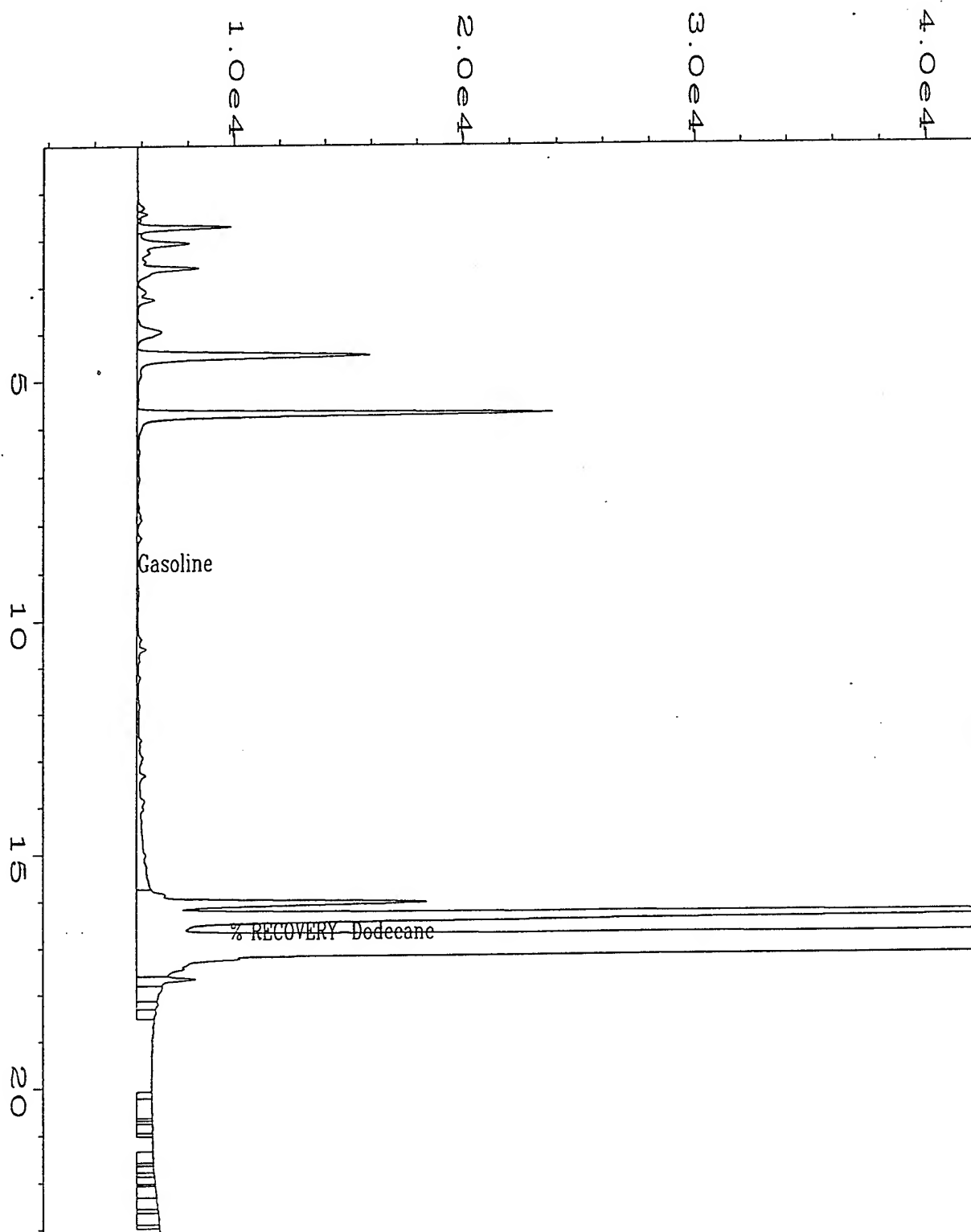
|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\009F0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 9           |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : MB071195                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVHBASE.MTH   |
| Acquired on        | : 12 Jul 95 06:21 PM                  | Analysis Method    | : TVH0711.MTH |
| Report Created on: | 13 Jul 95 02:00 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |



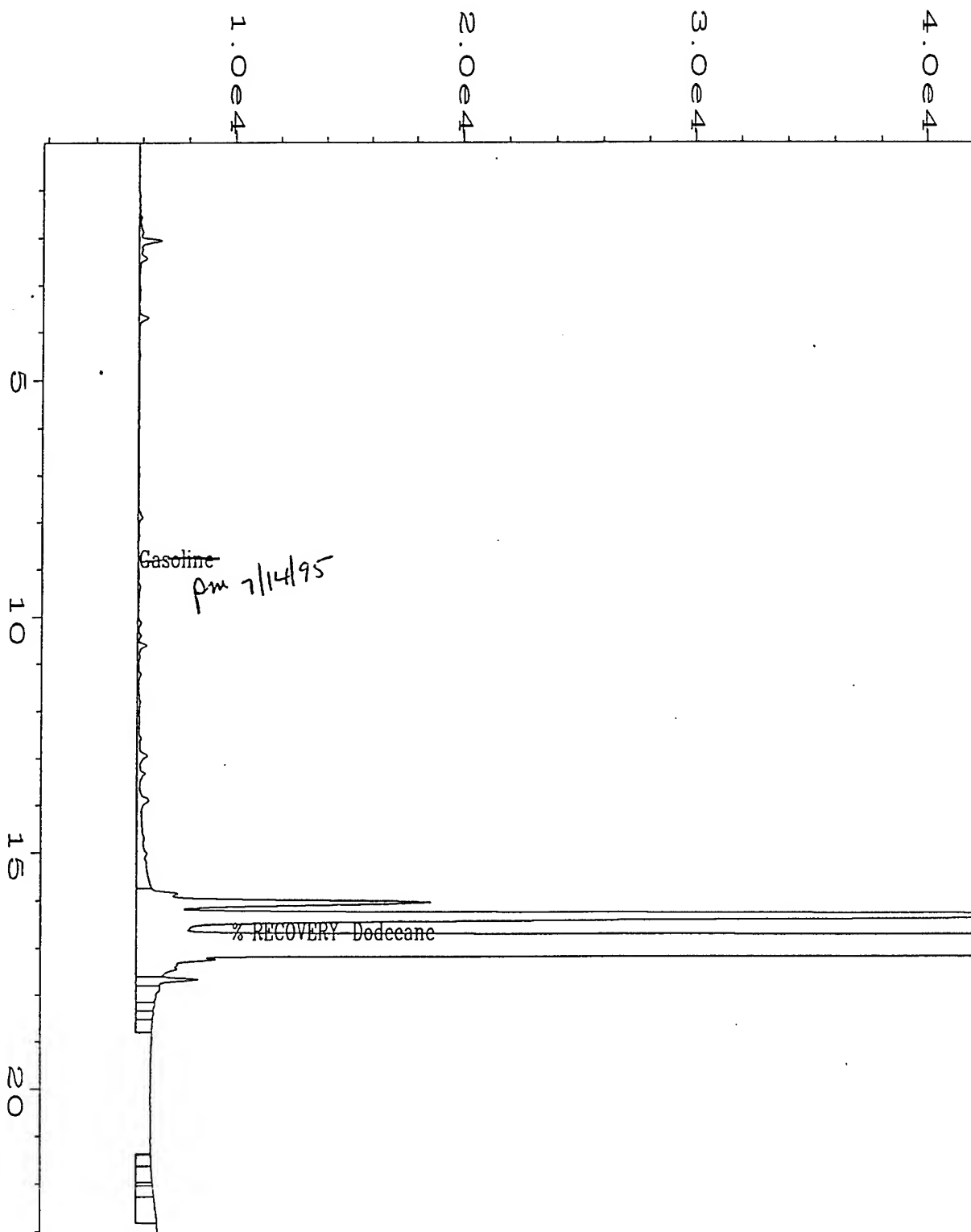
|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\010F0101.D | Page Number       | : 1          |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 10         |
| Instrument         | : TVH                                 | Injection Number  | : 1          |
| Sample Name        | : X08741D;1                           | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : TVHBAS.MT  |
| quired on          | : 12 Jul 95 07:01 PM                  | Analysis Method   | : TVH0711.MT |
| Report Created on: | : 13 Jul 95 02:00 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-20;WATER                 |                   |              |



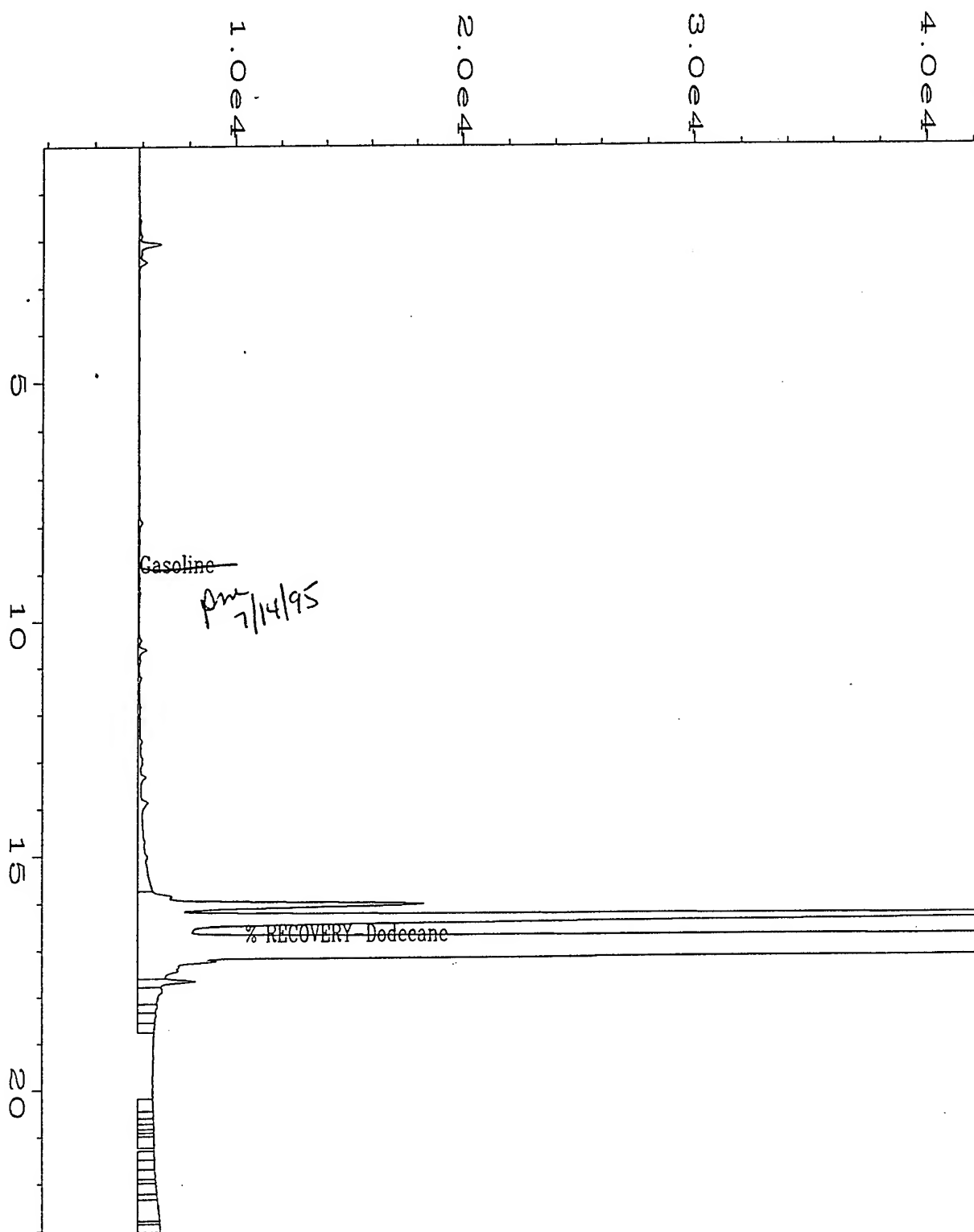
|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\011F0101.D | Page Number       | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 11          |
| Instrument         | : TVH                                 | Injection Number  | : 1           |
| Sample Name        | : X08735D;1                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : TVHBASE.MTH |
| Acquired on        | : 12 Jul 95 07:40 PM                  | Analysis Method   | : TVH0711.MTH |
| Report Created on  | : 13 Jul 95 02:00 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-2193;MW-16;WATER                 |                   |               |



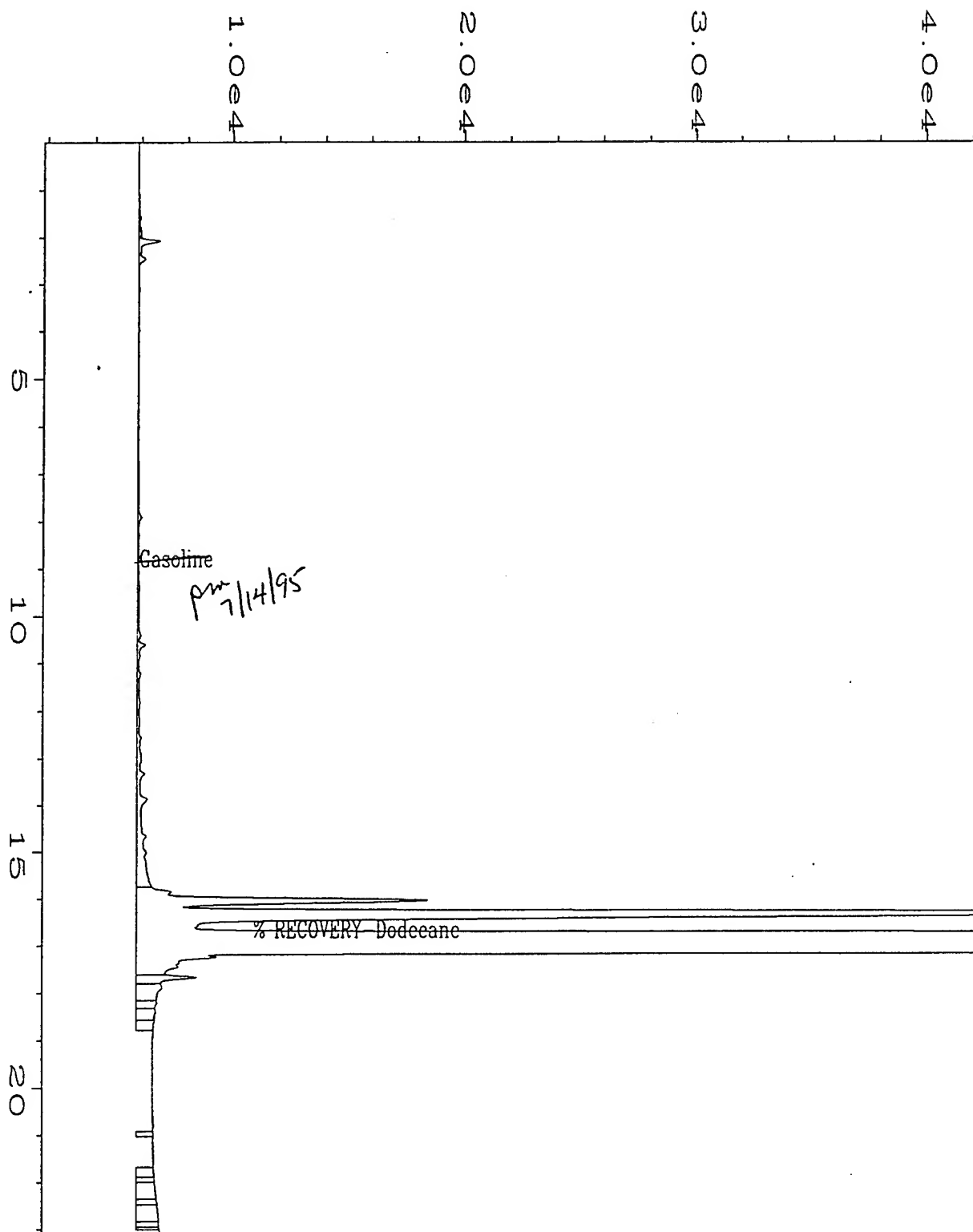
|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\012F0101.D | Page Number       | : 1          |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 12         |
| Instrument         | : TVH                                 | Injection Number  | : 1          |
| Sample Name        | : X08736D;1                           | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : TVHBAS.MT  |
| quired on          | : 12 Jul 95 08:19 PM                  | Analysis Method   | : TVH0711.MT |
| Report Created on: | : 13 Jul 95 02:00 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-17;WATER                 |                   |              |



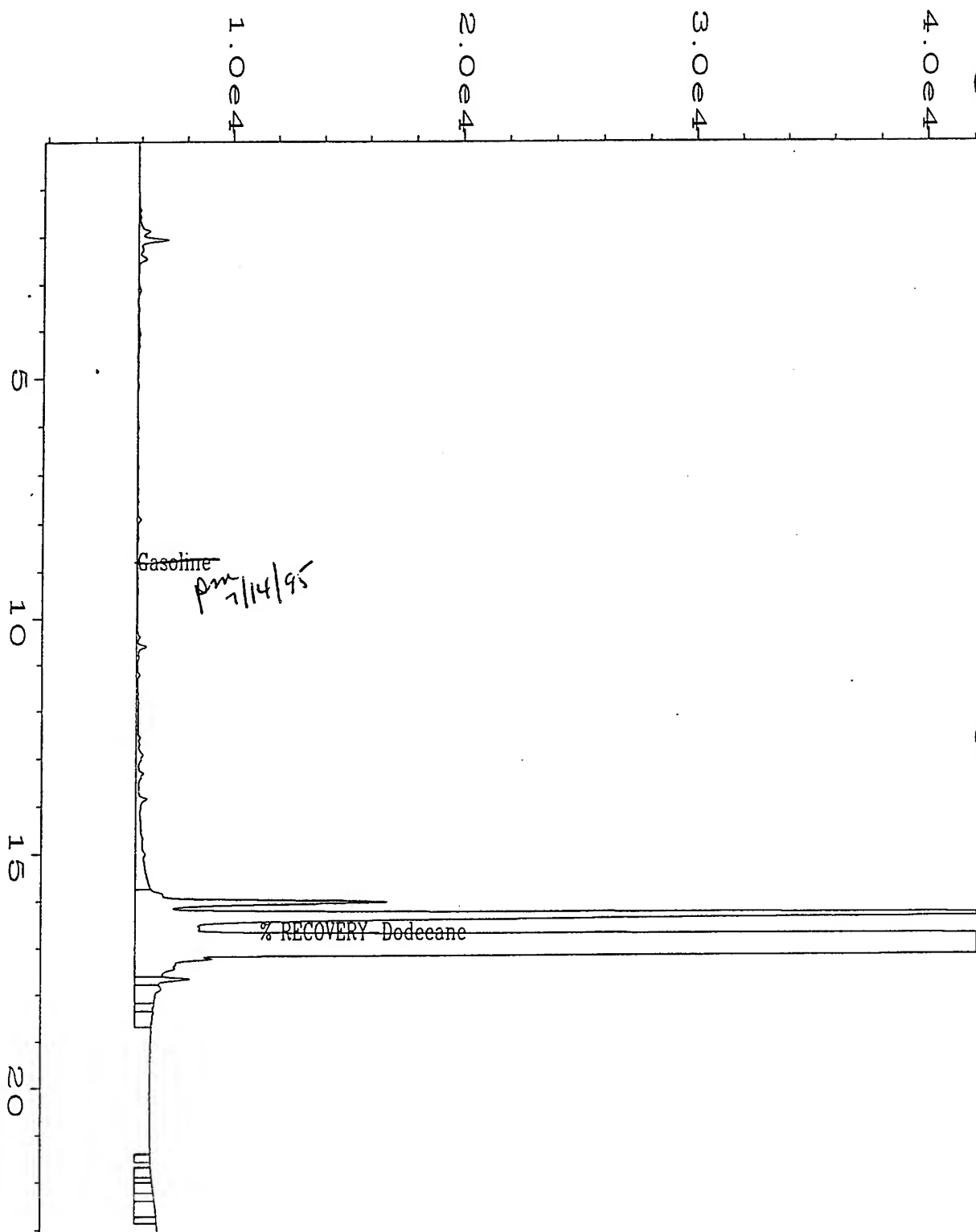
|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\013F0101.D | Page Number       | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 13          |
| Instrument         | : TVH                                 | Injection Number  | : 1           |
| Sample Name        | : X08737D;1                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : TVHBASE.MTH |
| Acquired on        | : 12 Jul 95 08:58 PM                  | Analysis Method   | : TVH0711.MTH |
| Report Created on  | : 13 Jul 95 02:00 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-2193;MW-15;WATER                 |                   |               |



|                    |                                       |                    |           |
|--------------------|---------------------------------------|--------------------|-----------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\014F0101.D | Page Number        | : 1       |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 14      |
| Instrument         | : TVH                                 | Injection Number   | : 1       |
| Sample Name        | : X08738D;1                           | Sequence Line      | : 1       |
| Run Time Bar Code: |                                       | Instrument Method: | TVHBAS    |
| quired on          | : 12 Jul 95 09:37 PM                  | Analysis Method    | : TVH0711 |
| Report Created on: | 13 Jul 95 02:00 PM                    | Sample Amount      | : 0       |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount        | :         |
| Multiplier         | : 1                                   |                    |           |
| Sample Info        | : 95-2193;MW-14;WATER                 |                    |           |



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\015F0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 15          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X08739D;1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVHBASE.MTH   |
| Acquired on        | : 12 Jul 95 10:16 PM                  | Analysis Method    | : TVH0711.MTH |
| Report Created on: | 13 Jul 95 02:01 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-2193;MW-19;WATER                 |                    |               |



|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\016F0101.D | Page Number       | : 1          |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 16         |
| Instrument         | : TVH                                 | Injection Number  | : 1          |
| Sample Name        | : X08740D;1                           | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : TVHBAS.MT  |
| quired on          | : 12 Jul 95 10:55 PM                  | Analysis Method   | : TVH0711.MT |
| ort Created on:    | : 13 Jul 95 02:01 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-18;WATER                 |                   |              |

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TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
TVH Matrix Spike/Matrix Spike Duplicate Data Report

|                   |           |                    |                      |
|-------------------|-----------|--------------------|----------------------|
| Client Sample No. | : MW-20   | Client Project No. | : 722450.26          |
| Lab Sample No.    | : X08741  | Lab Project No.    | : 95-2193            |
| Date Sampled      | : 7/10/95 | EPA Method No.     | : 5030/8015 Modified |
| Date Received     | : 7/11/95 | Matrix             | : Water              |
| Date Prepared     | : 7/12/95 | Method Blank       | : MB071195           |
| Date Analyzed     | : 7/12/95 |                    |                      |

| Compound | Spike Added (mg/L) | Sample Concentration (mg/L) | MS Concentration (mg/L) | MS %REC | QC Limits %REC |
|----------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Gasoline | 2.00               | 0.0                         | 1.86                    | 93%     | 60-140         |

| Compound | Spike Added (mg/L) | MSD Concentration (mg/L) | MSD %REC | RPD | QC Limits |        |
|----------|--------------------|--------------------------|----------|-----|-----------|--------|
|          |                    |                          |          |     | RPD       | %REC   |
| Gasoline | 2.00               | 1.88                     | 94%      | 1.0 | 50        | 60-140 |


RPD: 0 out of (1) outside limits.  
Spike Recovery: 0 out of (2) outside limits.

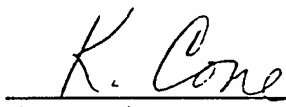
Notes:

NA = Not analyzed/not applicable.

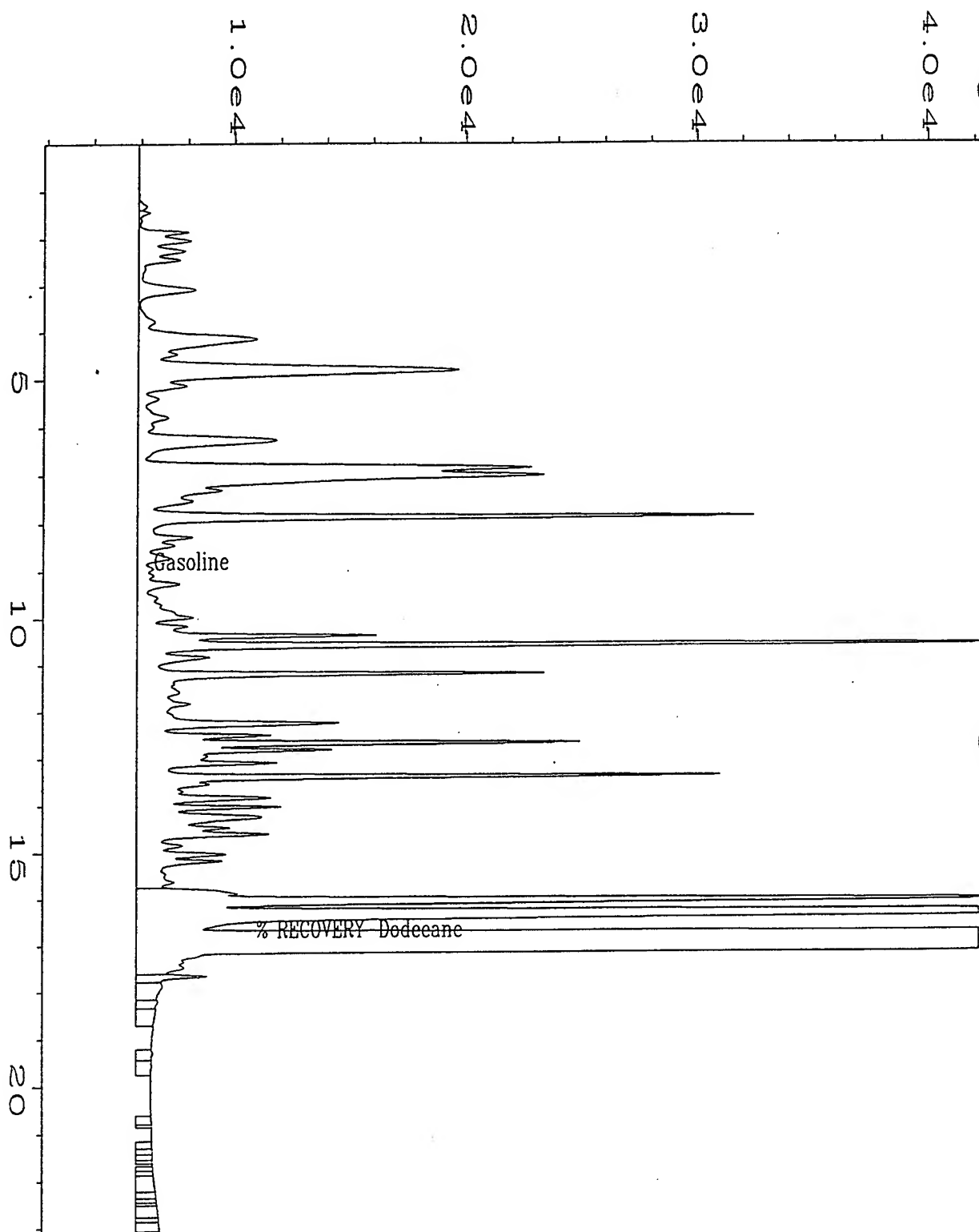
\* = Values outside of QC limits.

Comments:

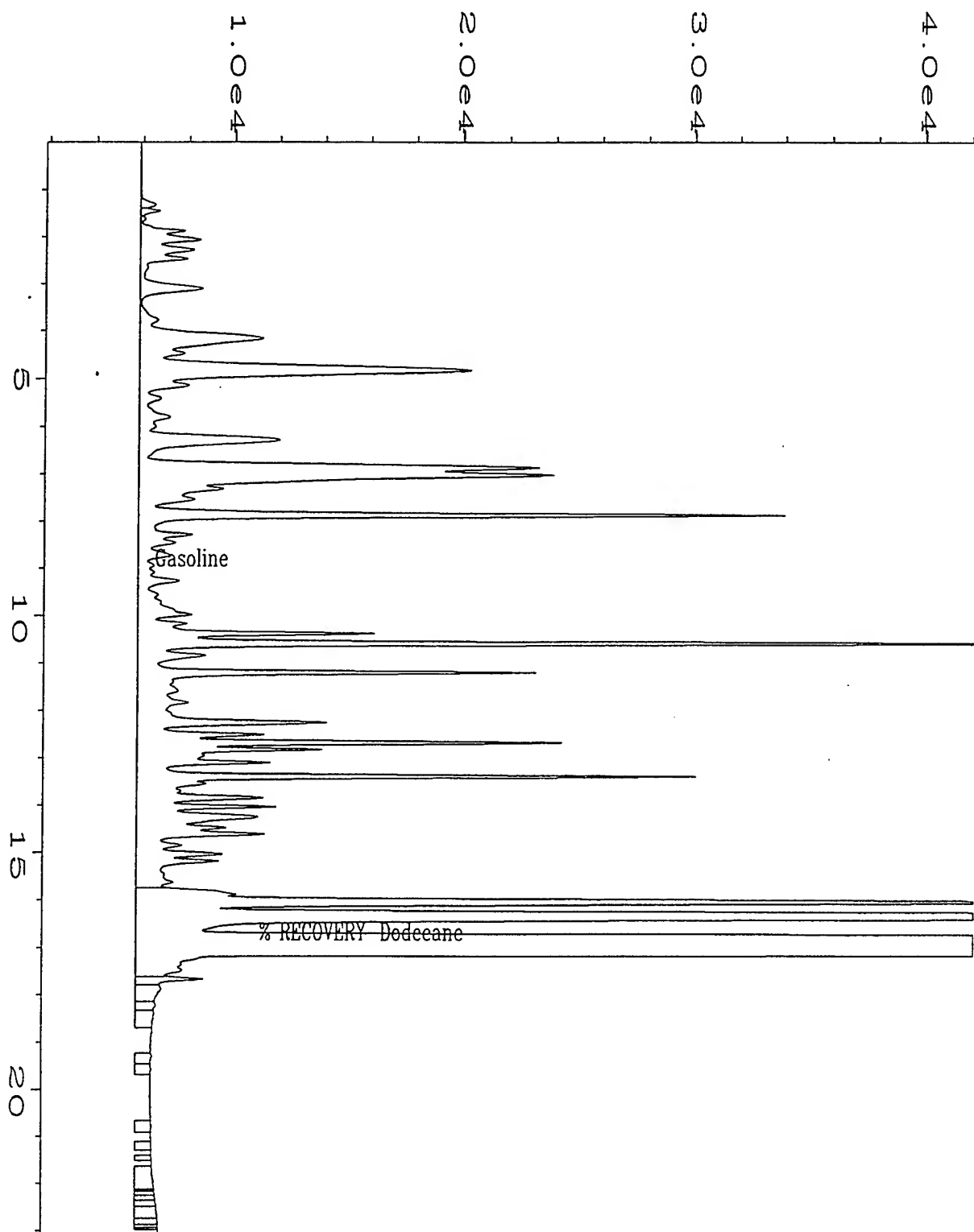
  
Analyst

  
Approved

MSTV2193.XLS7/13/95



|                    |                                       |                   |           |
|--------------------|---------------------------------------|-------------------|-----------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\017F0101.D | Page Number       | : 1       |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 17      |
| Instrument         | : TVH                                 | Injection Number  | : 1       |
| Sample Name        | : X08741D MS                          | Sequence Line     | : 1       |
| Run Time Bar Code: |                                       | Instrument Method | : TVHBAS  |
| quired on          | : 12 Jul 95 11:34 PM                  | Analysis Method   | : TVH0711 |
| port Created on:   | : 13 Jul 95 02:01 PM                  | Sample Amount     | : 0       |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount       | :         |
| Multiplier         | : 1                                   |                   |           |



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\018F0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 18          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X08741D MSD                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVHBASE.MTH   |
| Acquired on        | : 13 Jul 95 00:13 AM                  | Analysis Method    | : TVH0711.MTH |
| Report Created on: | 13 Jul 95 02:01 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

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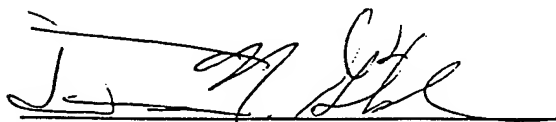
TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
Laboratory Control Sample (LCS)

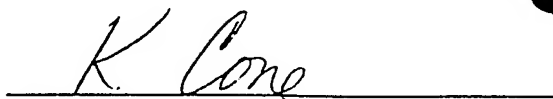
LCS Number : LCS071195      Matrix : WATER  
Date Prepared : 7/12/95      Method Numbers : EPA 5030/8015 Modified  
Date Analyzed : 7/12/95  
Sequence Number : 008F0101.D

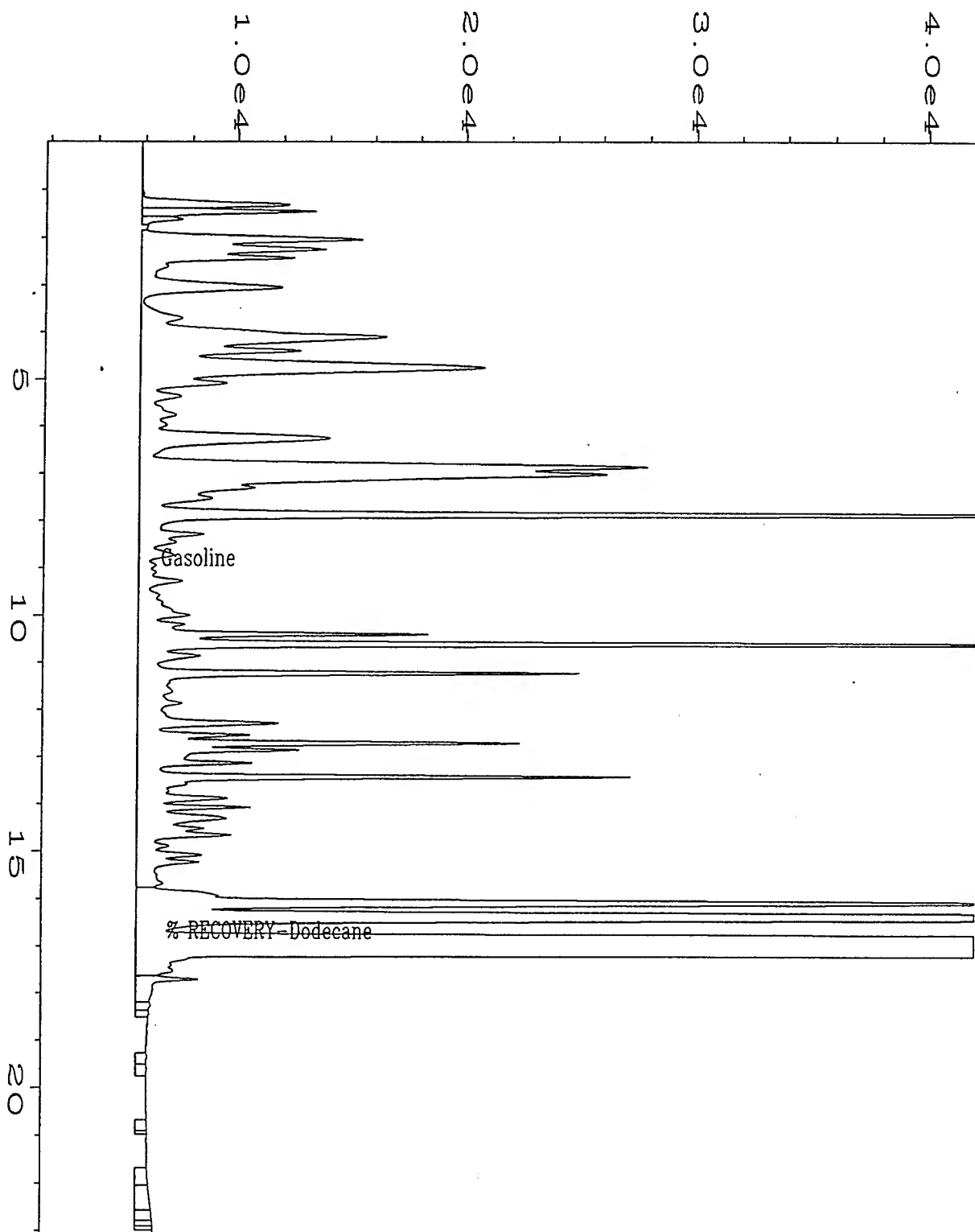
| <u>Compound Name</u> | <u>Theoretical Concentration mg/L</u> | <u>LCS Concentration mg/ L</u> | <u>LCS % Recovery</u> | <u>QC Limit % Recovery</u> |
|----------------------|---------------------------------------|--------------------------------|-----------------------|----------------------------|
| Gasoline             | 2.00                                  | 2.34                           | 117%                  | 70%-130%                   |

QUALIFIERS

U = TVH analyzed for but not detected.  
B = TVH as Gasoline found in blank also.  
E = Extrapolated value. Exceeds calibration range.  
NA = Not Available/Not Applicable.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0711\008F0101.D | Page Number       | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 8           |
| Instrument         | : TVH                                 | Injection Number  | : 1           |
| Sample Name        | : LCS071195                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : TVHBASE.MTH |
| Acquired on        | : 12 Jul 95 05:40 PM                  | Analysis Method   | : TVH0711.MTH |
| Report Created on: | 13 Jul 95 02:00 PM                    | Sample Amount     | : 0           |
| Last Recalib on    | : 13 JUL 95 01:51 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : #1492                               |                   |               |

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TOTAL EXTRACTABLE HYDROCARBONS (TEH as Jet Fuel)

|               |              |                       |                 |
|---------------|--------------|-----------------------|-----------------|
| Date Sampled  | : 7/10/95    | Client Project Number | : 722450.26     |
| Date Received | : 7/11/95    | Lab Project Number    | : 95-2193       |
| Date Prepared | : 7/11/95    | Matrix                | : Water         |
| Date Analyzed | : 7/13,14/95 | Method Number         | : 3500/Mod.8015 |

| Evergreen<br>Sample # | Client<br>Sample # | Surrogate<br>Recovery | TEH<br>Jet Fuel<br>mg/L | RL<br>mg/L |
|-----------------------|--------------------|-----------------------|-------------------------|------------|
| WB071195              | WATER METHOD BLANK | 91%                   | U                       | 0.5        |
| X08735                | MW-16              | 102%                  | U                       | 0.5        |
| X08736                | MW-17              | 97%                   | U                       | 0.5        |
| X08737                | MW-15              | 81%                   | U                       | 0.5        |
| X08738                | MW-14              | 83%                   | U                       | 0.5        |
| X08739                | MW-19              | 97%                   | U                       | 0.5        |
| X08740                | MW-18              | 89%                   | U                       | 0.5        |
| X08741                | MW-20              | 93%                   | U                       | 0.5        |

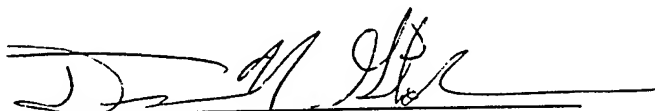
QUALIFIERS

U = TEH as Jet Fuel analyzed for but not detected.

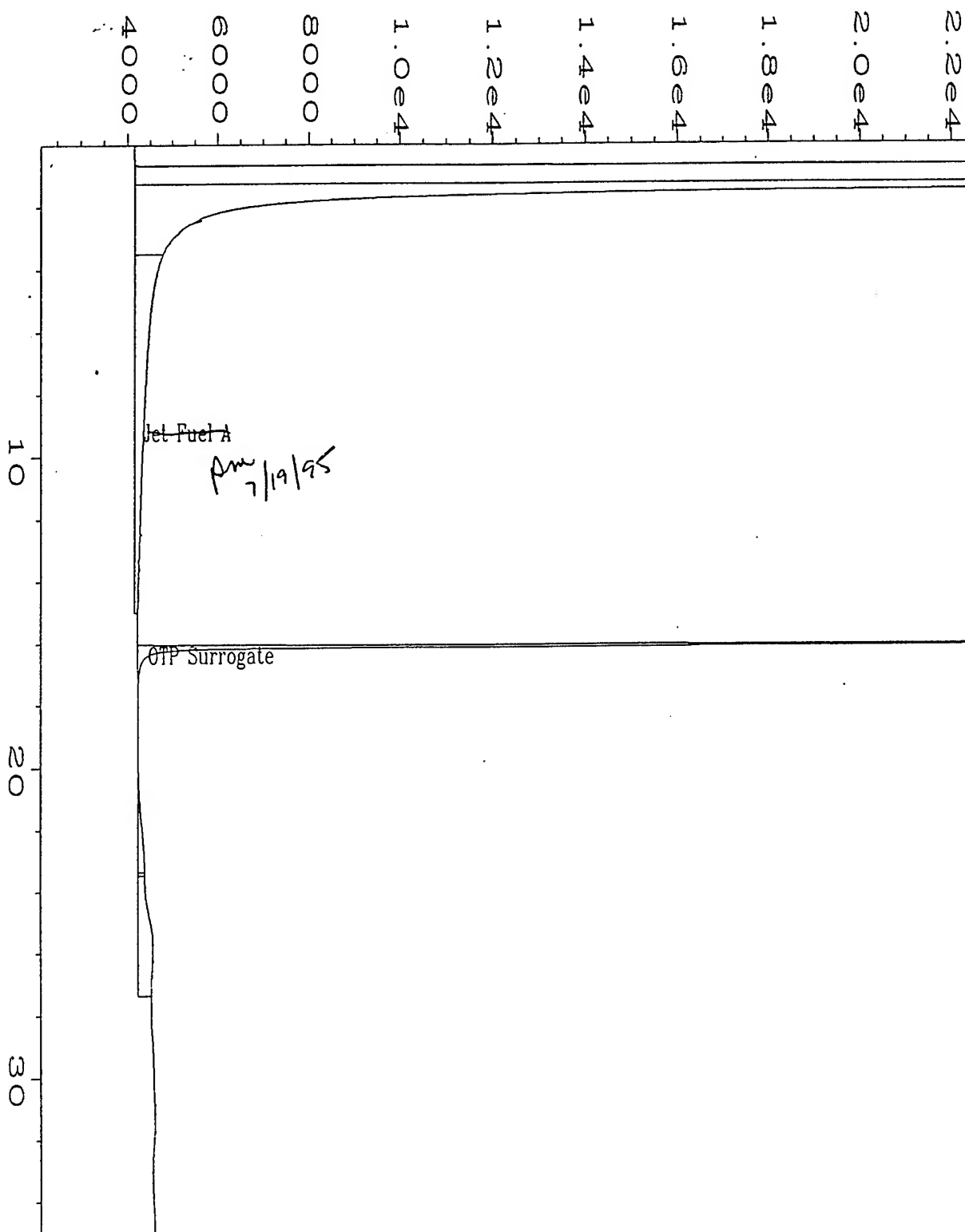
B = TEH as Jet Fuel found in blank also.

E = Extrapolated value.

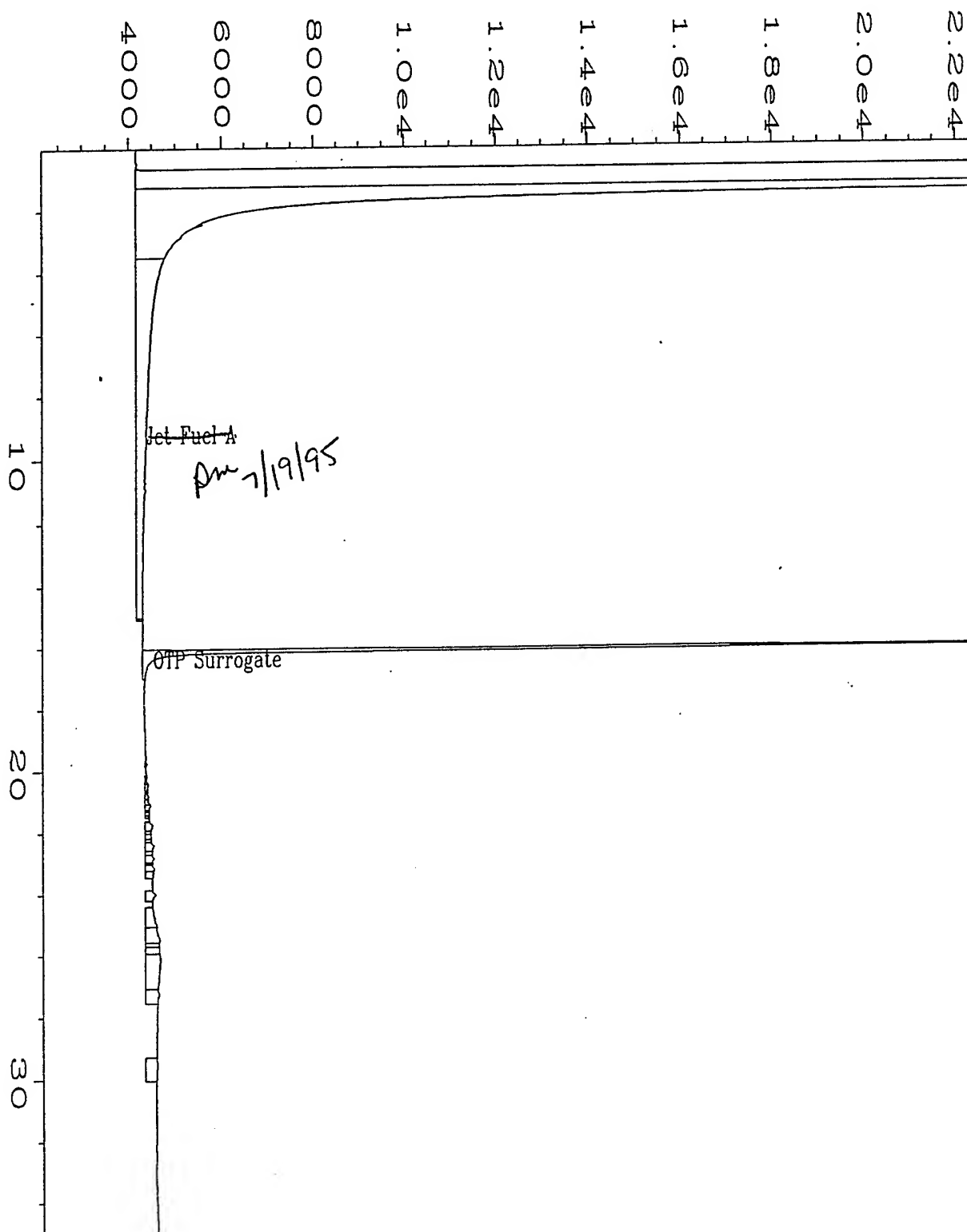
RL = Reporting Limit

  
Analyst

  
Approved

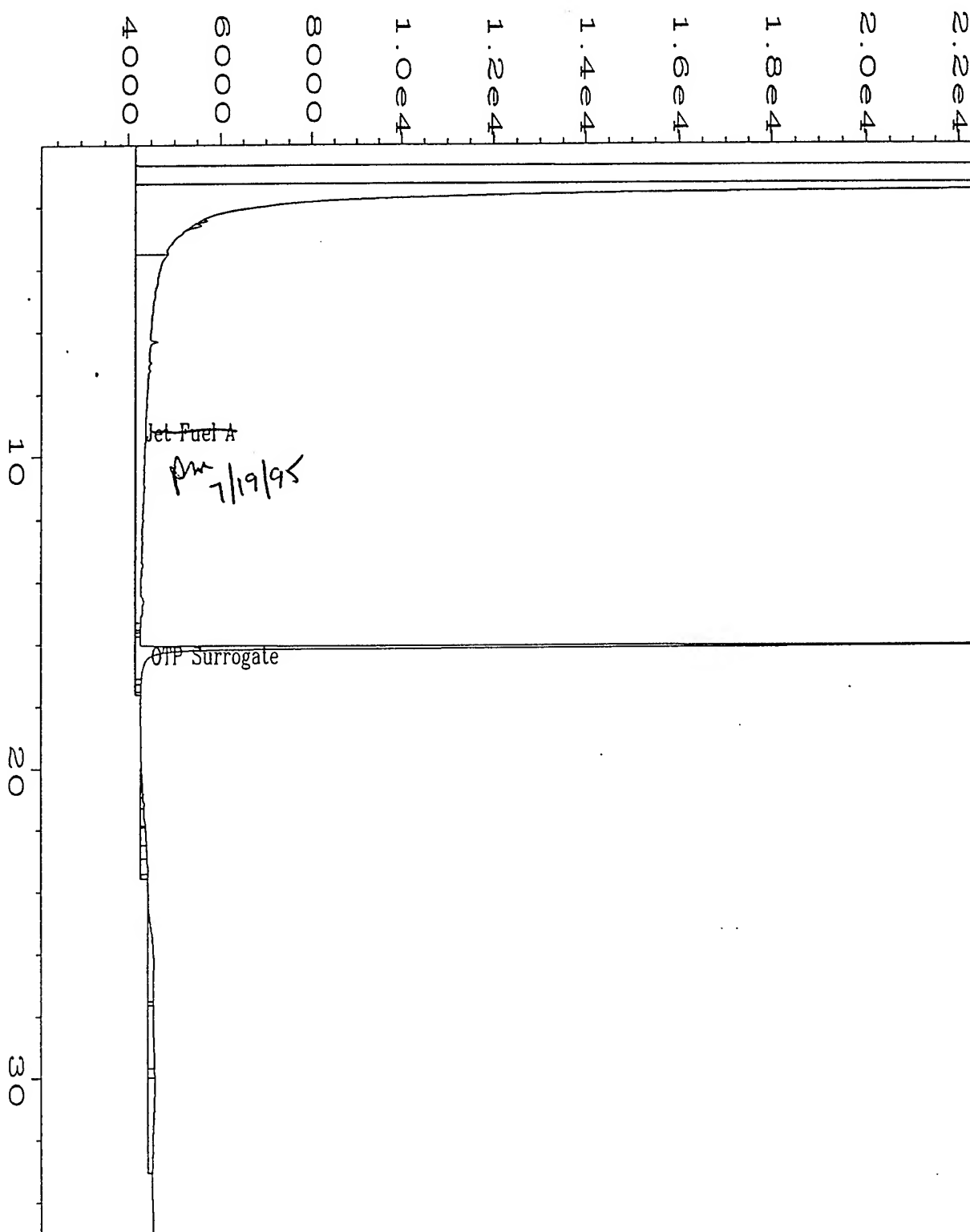


|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0713\009R0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 9           |
| Instrument         | : TEH                                 | Injection Number   | : 1           |
| Sample Name        | : WB071195                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TEHBASE.MTH   |
| Acquired on        | : 13 Jul 95 08:25 PM                  | Analysis Method    | : JET0713.MTH |
| Report Created on: | 14 Jul 95 10:37 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 14 JUL 95 10:24 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

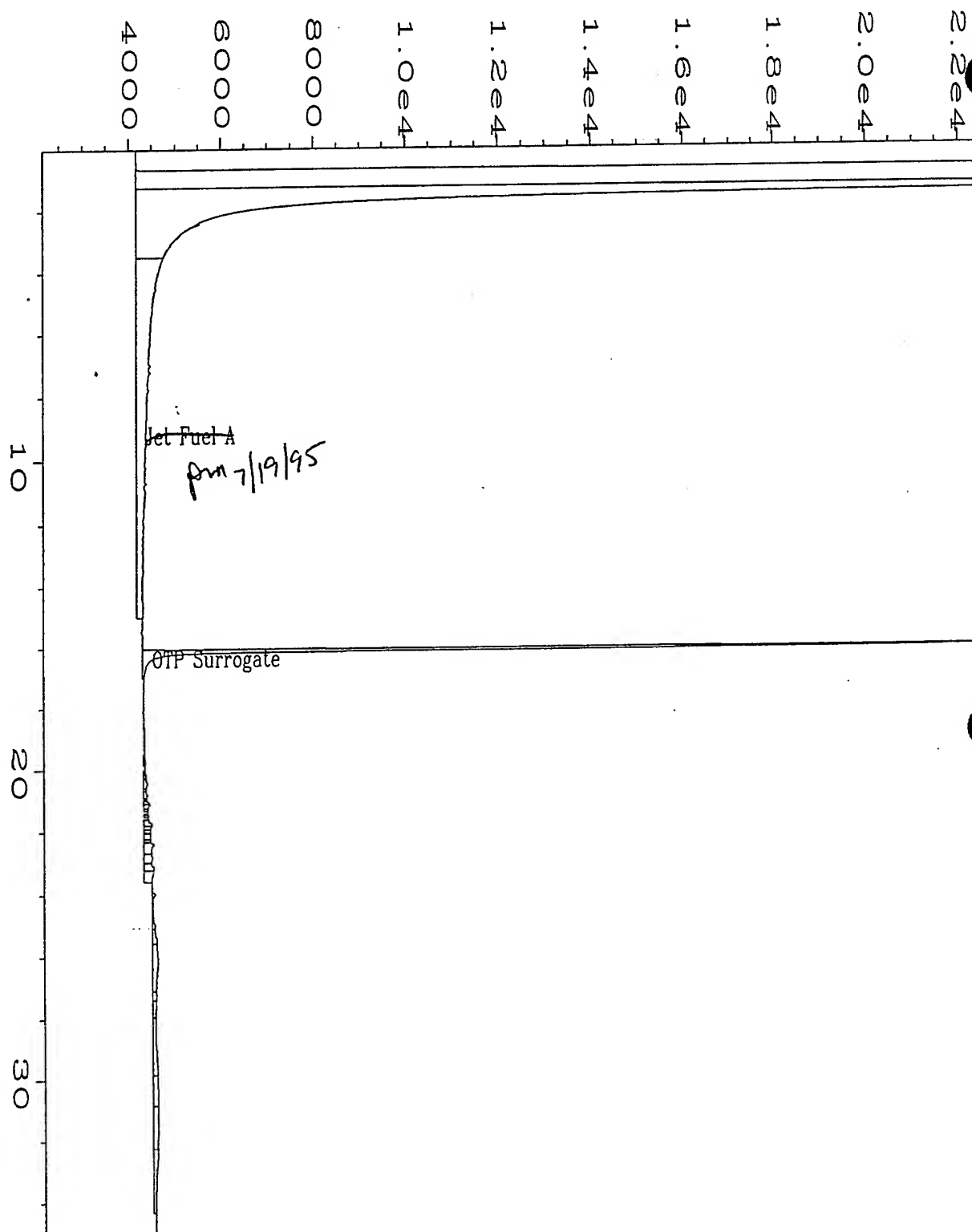


|                      |                                       |                    |              |
|----------------------|---------------------------------------|--------------------|--------------|
| Data File Name       | : C:\HPCHEM\2\DATA\JET0713\011R0101.D | Page Number        | : 1          |
| Operator             | : Dawn N. Guildner                    | Vial Number        | : 11         |
| Instrument           | : TEH                                 | Injection Number   | : 1          |
| Sample Name          | : X08735K;1                           | Sequence Line      | : 1          |
| Print Time Bar Code: |                                       | Instrument Method: | TEHBAS.MT    |
| quired on            | : 13 Jul 95 10:08 PM                  | Analysis Method    | : JET0713.MT |
| Report Created on:   | 14 Jul 95 10:53 AM                    | Sample Amount      | : 0          |
| Last Recalib on      | : 14 JUL 95 10:24 AM                  | ISTD Amount        | :            |
| Multiplier           | : 1                                   |                    |              |

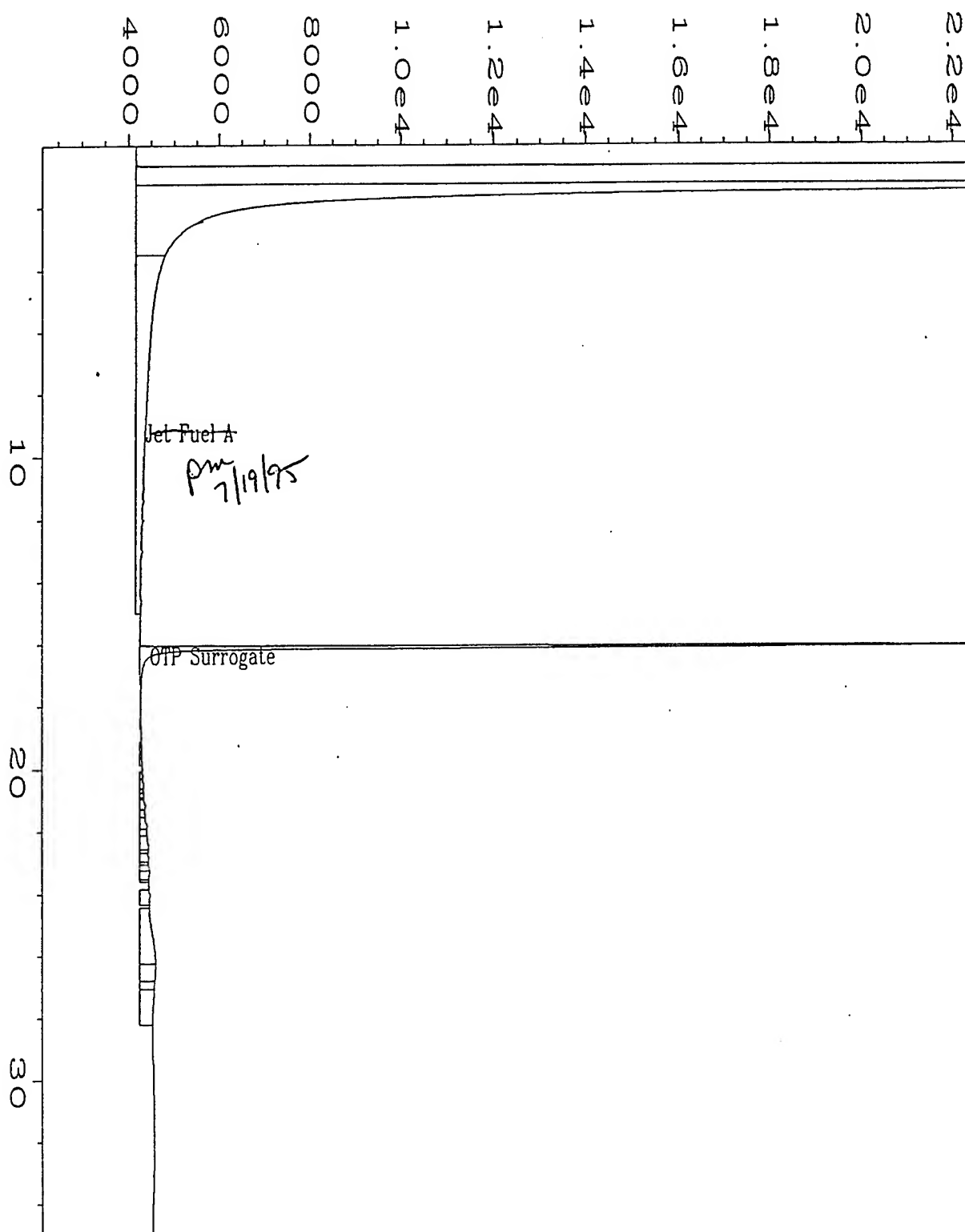
Client ID: MW-16



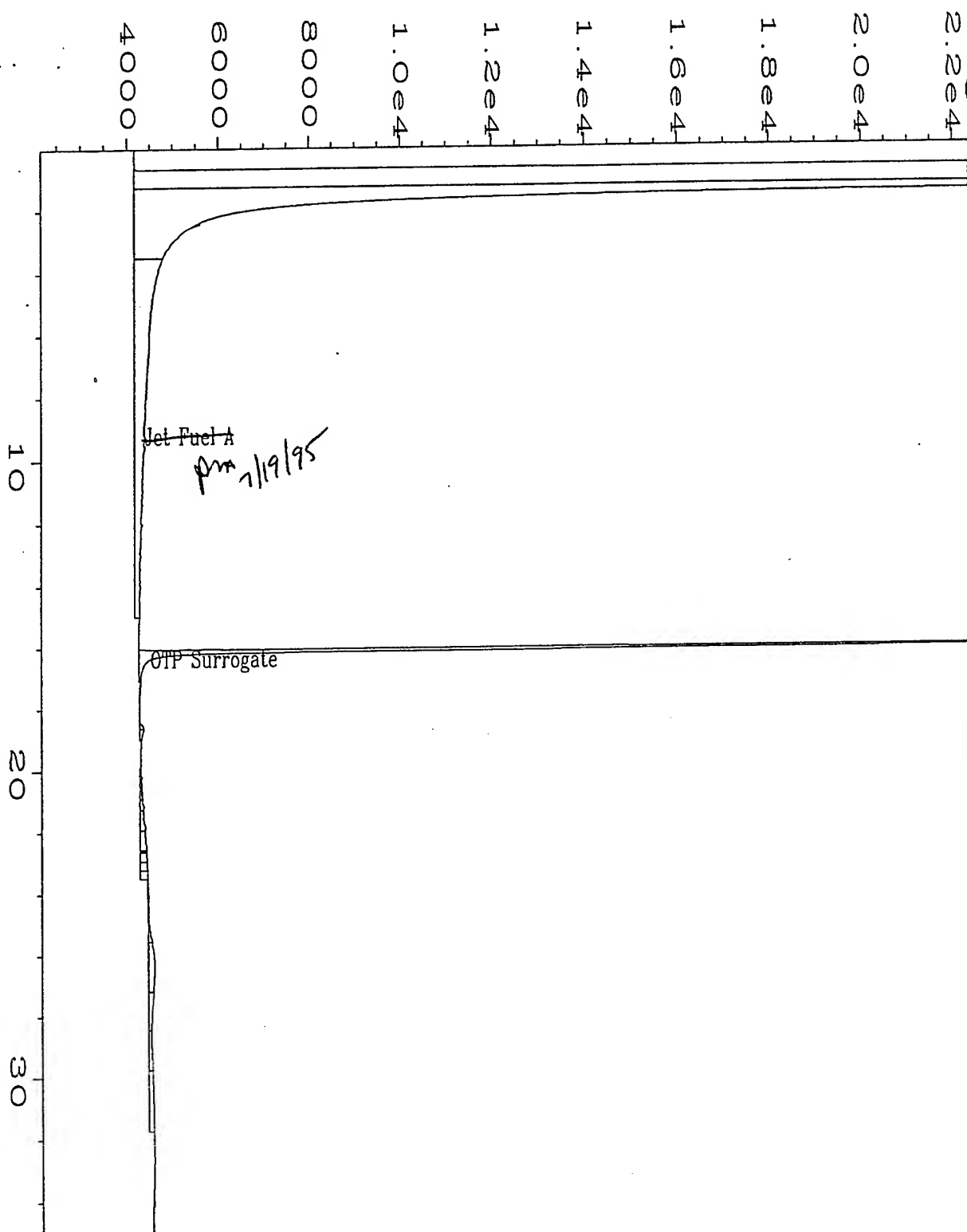
|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0713\012R0101.D | Page Number       | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 12          |
| Instrument         | : TEH                                 | Injection Number  | : 1           |
| Sample Name        | : X08736K;1                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : TEHBASE.MTH |
| Required on        | : 13 Jul 95 11:00 PM                  | Analysis Method   | : JET0713.MTH |
| Report Created on  | : 14 Jul 95 10:38 AM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 14 JUL 95 10:24 AM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-2193;MW-17;WATER                 |                   |               |



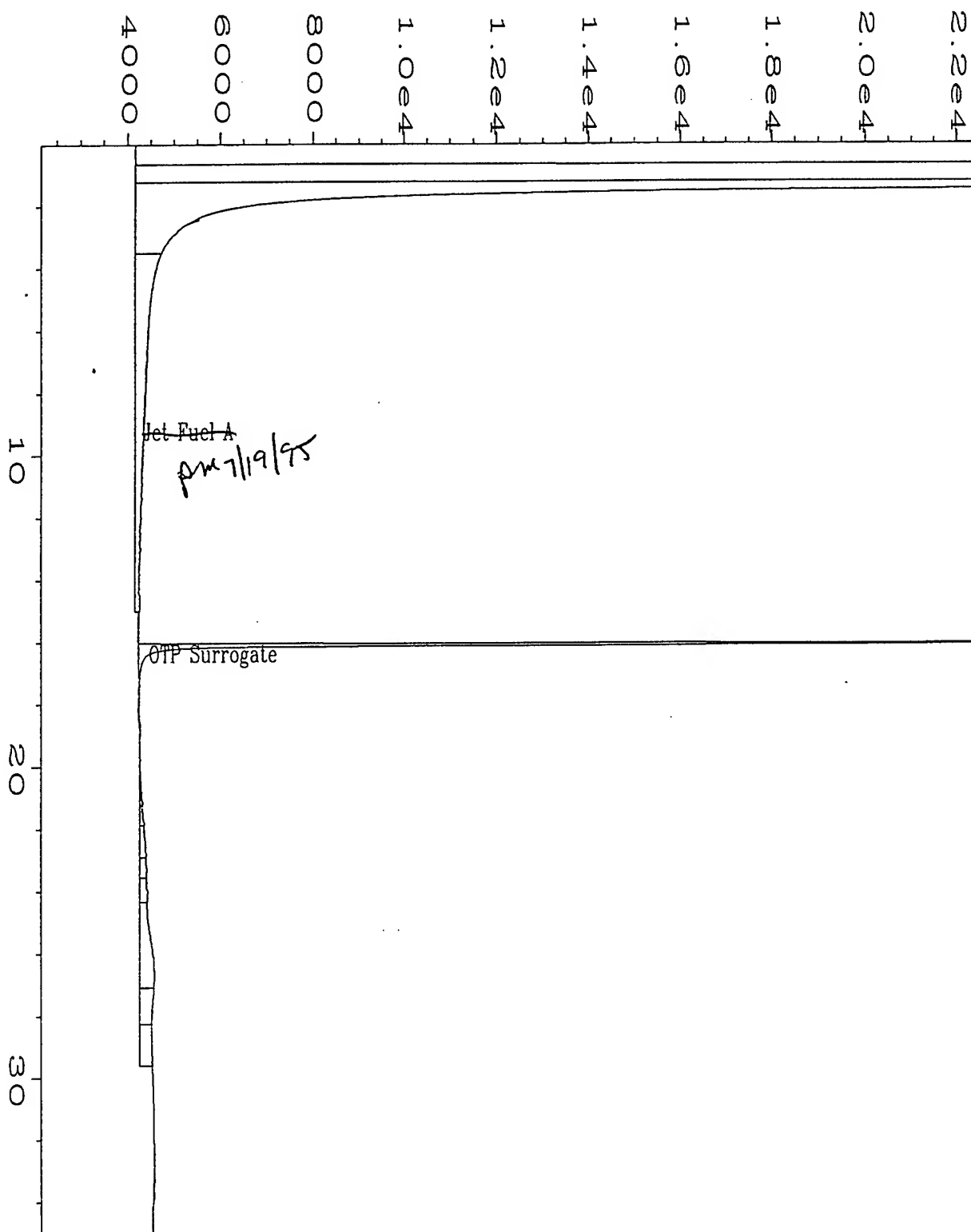
|                      |                                       |                   |             |
|----------------------|---------------------------------------|-------------------|-------------|
| Data File Name       | : C:\HPCHEM\2\DATA\JET0713\013R0101.D | Page Number       | : 1         |
| Operator             | : Dawn N. Guildner                    | Vial Number       | : 13        |
| Instrument           | : TEH                                 | Injection Number  | : 1         |
| Sample Name          | : X08737K;1                           | Sequence Line     | : 1         |
| Print Time Bar Code: |                                       | Instrument Method | : TEHBA.M   |
| quired on            | : 13 Jul 95 11:51 PM                  | Analysis Method   | : JET0713.M |
| Report Created on:   | : 14 Jul 95 10:38 AM                  | Sample Amount     | : 0         |
| Last Recalib on      | : 14 JUL 95 10:24 AM                  | ISTD Amount       | :           |
| Multiplier           | : 1                                   |                   |             |
| Sample Info          | : 95-2193;MW-15;WATER                 |                   |             |



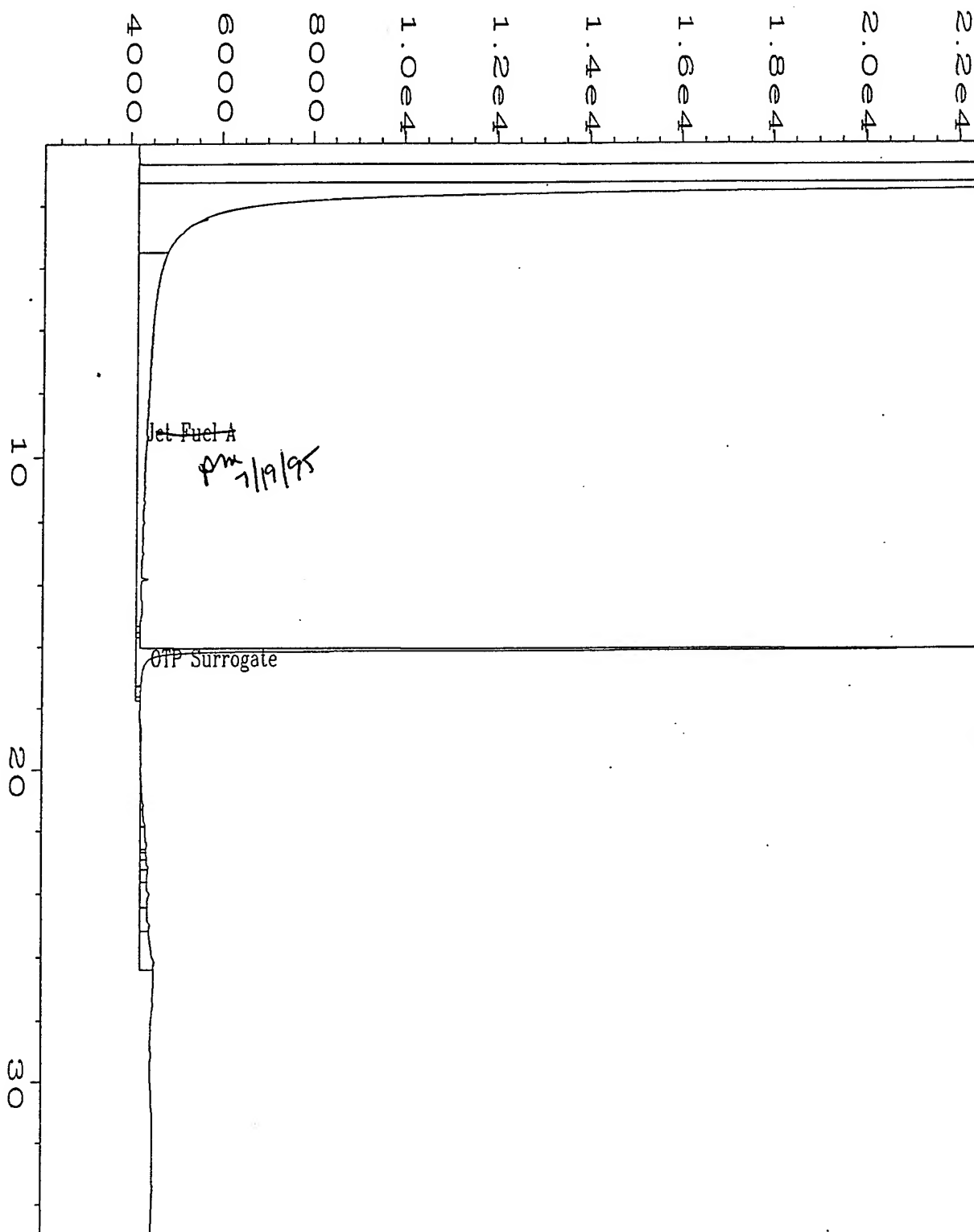
|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0713\014R0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 14          |
| Instrument         | : TEH                                 | Injection Number   | : 1           |
| Sample Name        | : X08738K;1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TEHBASE.MTH   |
| Acquired on        | : 14 Jul 95 00:43 AM                  | Analysis Method    | : JET0713.MTH |
| Report Created on: | 14 Jul 95 10:38 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 14 JUL 95 10:24 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-2193;MW-14;WATER                 |                    |               |



|                    |                                       |                   |          |
|--------------------|---------------------------------------|-------------------|----------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0713\015R0101.D | Page Number       | : 1      |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 15     |
| Instrument         | : TEH                                 | Injection Number  | : 1      |
| Sample Name        | : X08739K;1                           | Sequence Line     | : 1      |
| Run Time Bar Code: |                                       | Instrument Method | : TEHBAS |
| quired on          | : 14 Jul 95 01:35 AM                  | Analysis Method   | : JET071 |
| Report Created on: | : 14 Jul 95 10:38 AM                  | Sample Amount     | : 0      |
| Last Recalib on    | : 14 JUL 95 10:24 AM                  | ISTD Amount       | :        |
| Multiplier         | : 1                                   |                   |          |
| Sample Info        | : 95-2193;MW-19;WATER                 |                   |          |



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0713\016R0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 16          |
| Instrument         | : TEH                                 | Injection Number   | : 1           |
| Sample Name        | : X08740K;1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TEHBASE.MTH   |
| Acquired on        | : 14 Jul 95 02:26 AM                  | Analysis Method    | : JET0713.MTH |
| Report Created on: | 14 Jul 95 10:38 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 14 JUL 95 10:24 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-2193;MW-18;WATER                 |                    |               |



|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0713\017R0101.D | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 17         |
| Instrument         | : TEH                                 | Injection Number   | : 1          |
| Sample Name        | : X08741K;1                           | Sequence Line      | : 1          |
| Run Time Bar Code: |                                       | Instrument Method: | TEHBAS       |
| Acquired on        | : 14 Jul 95 03:18 AM                  | Analysis Method    | : JET0713.MT |
| Report Created on: | 14 Jul 95 10:38 AM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 14 JUL 95 10:24 AM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |
| Sample Info        | : 95-2193;MW-20;WATER                 |                    |              |

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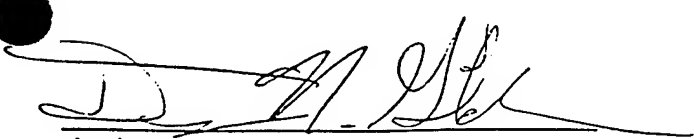
TOTAL EXTRACTABLE HYDROCARBONS (TEH as Jet Fuel)  
Laboratory Control Sample (LCS)

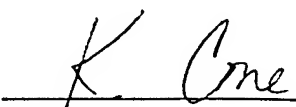
LCS Number : LCS071395 Matrix : WATER  
Date Prepared : 7/13/95 Method Number : EPA 3500/8015 Modified  
Date Analyzed : 7/13/95  
Sequence Number : JET007R0101.D

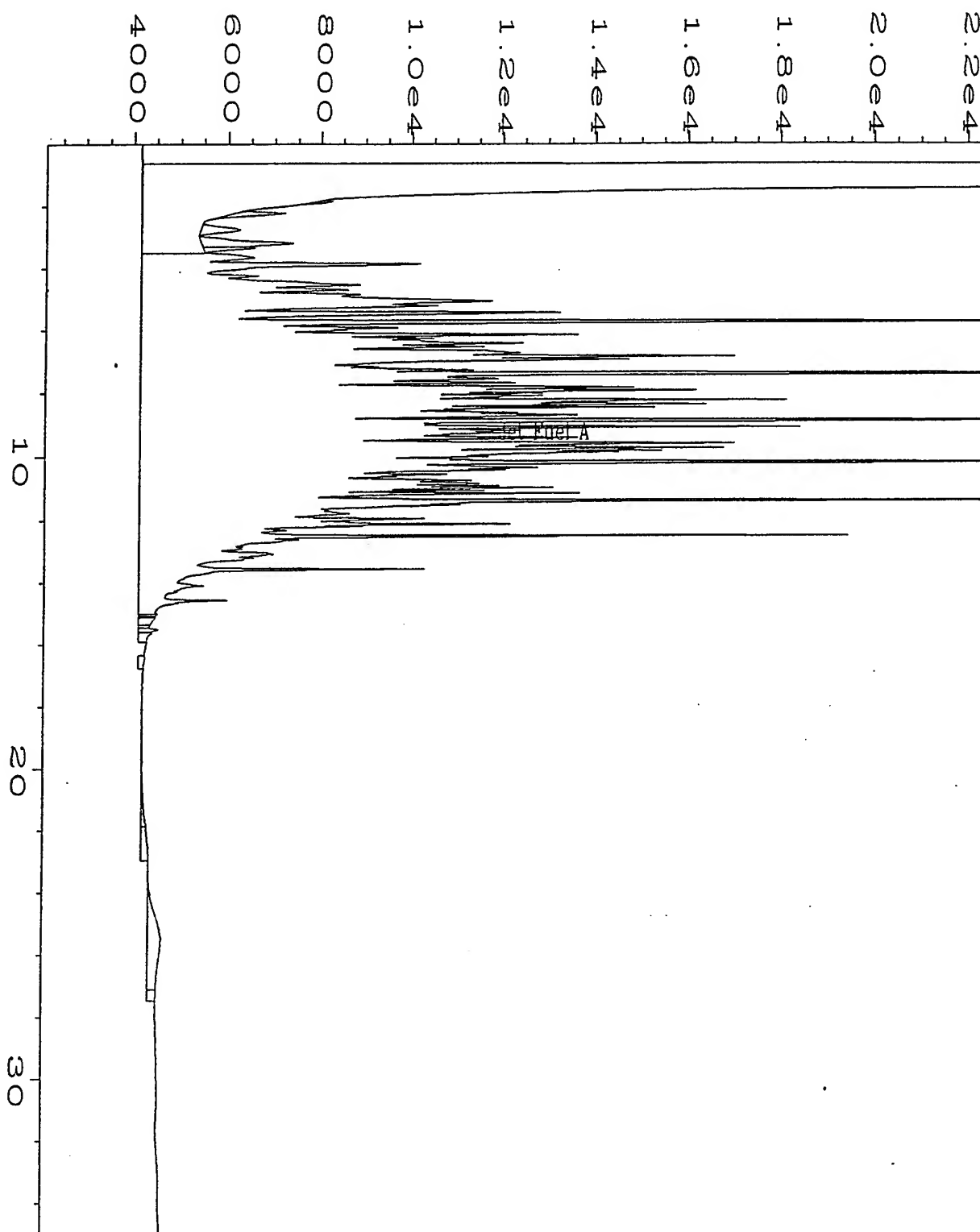
| <u>Compound<br/>Name</u>  | <u>Theoretical<br/>Concentration<br/>mg/L</u> | <u>LCS<br/>Concentration<br/>mg/ L</u> | <u>LCS<br/>%<br/>Recovery</u> | <u>QC Limit<br/>% Recovery</u> |
|---------------------------|---|--|-------------------------------|--------------------------------|
| JET FUEL                  | 5000  | 5000                                   | 100%                          | 70%-130%                       |
| OTP Surrogate % Recovery: |   |  |                               | 70%-130%                       |

QUALIFIERS

U = TEH analyzed for but not detected.  
B = TEH as Jet Fuel found in blank also.  
E = Extrapolated value.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |   |                    |               |
|--------------------|---|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0713\007R0101.D     | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                        | Vial Number        | : 7           |
| Instrument         | : TEH                                     | Injection Number   | : 1           |
| Sample Name        | : LCS071395                               | Sequence Line      | : 1           |
| Run Time Bar Code: |   | Instrument Method: | TEHBASE.MTH   |
| Acquired on        | : 13 Jul 95 06:41 PM                      | Analysis Method    | : JET0713.MTH |
| Report Created on: | 14 Jul 95 10:27 AM                        | Sample Amount      | : 0           |
| Last Recalib on    | : 14 JUL 95 10:24 AM                      | ISTD Amount        | :             |
| Multiplier         | : 1                                       |                    |               |
| Sample Info        | : CAT.#31215;CAT.#A004154;RESTEK;5000 PPM |                    |               |

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Methane Report Form  
Method Blank Report

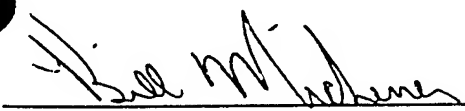
Method Blank Number : GB071495  
Date Extracted/Prepared : 7/14/95  
Date Analyzed : 7/14/95

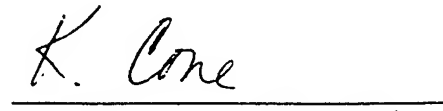
Client Project No. : 722450.26  
Lab Project No. : 95-2193  
Dilution Factor : 1.00  
Method : RSKSOP-175  
Matrix : Water  
Lab File No. : GAS0714002

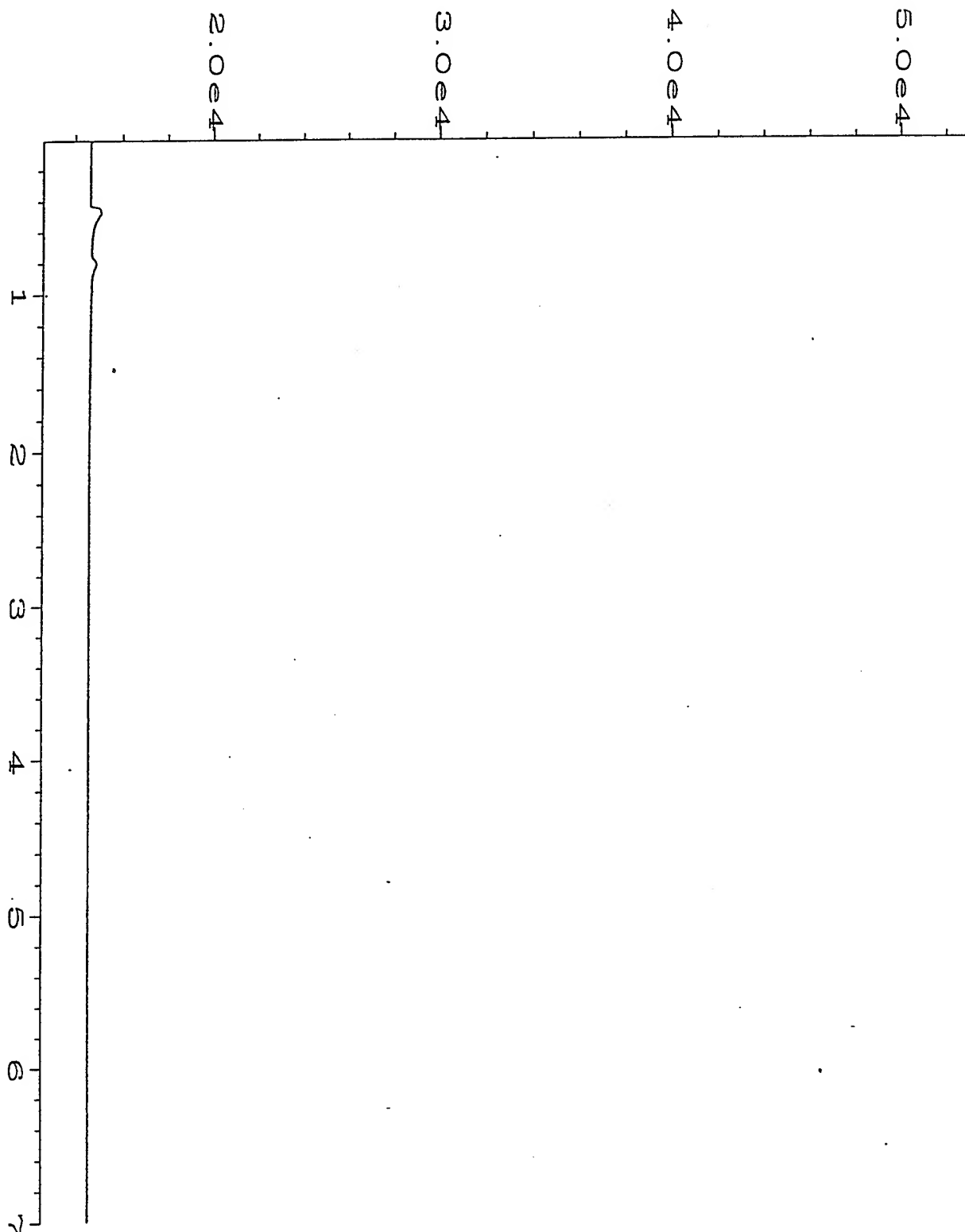
| Compound Name | Cas Number | Sample<br>Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|---------------------------------|------------|
| Methane       | 74-82-8    | U                               | 0.004      |

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
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|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\002R0101.D | Page Number        | : 1           |
| Operator           | : Bill Michener                       | Vial Number        | : 2           |
| Instrument         | : ALC/GAS                             | Injection Number   | : 1           |
| Sample Name        | : GB071495                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | GASES.M       |
| Aired on           | : 14 Jul 95 08:02 AM                  | Analysis Method    | : METH0714.MT |
| Report Created on: | 14 Jul 95 01:58 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-16   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08735  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714010 |


| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | 0.142                        | 0.004      |

|                        |              |                    |               |
|------------------------|--------------|--------------------|---------------|
| Temperature            | : 73 F       | Saturation Meth    | : 0.034148524 |
| Amount Injected        | : 0.5 ml     | Concentration      |               |
| Total Volume of Sample | : 43 ml      | Concentration Meth | : 0.107392382 |
| Head space created     | : 4 ml       | in Head Space      |               |
| Methane Area           | : 794.107 ug |                    |               |

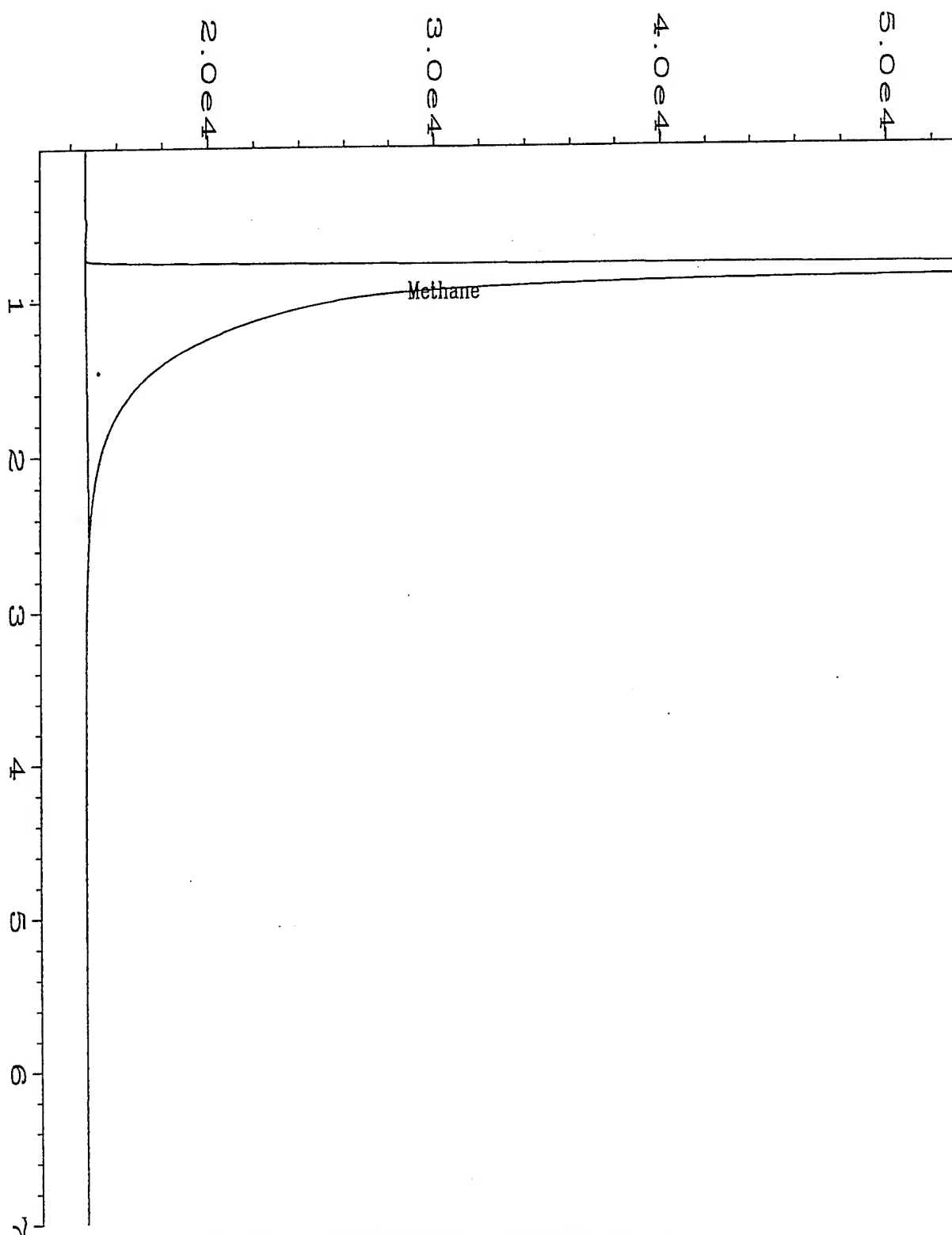
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
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|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\010R0101.D | Page Number       | : 1         |
| Operator           | : Bill Michener                       | Vial Number       | : 10        |
| Instrument         | : ALC/GAS                             | Injection Number  | : 1         |
| Sample Name        | : X08735;1                            | Sequence Line     | : 1         |
| Run Time Bar Code: |                                       | Instrument Method | : GASES.M   |
| quired on          | : 14 Jul 95 09:56 AM                  | Analysis Method   | : METH071.M |
| Report Created on: | : 14 Jul 95 01:59 PM                  | Sample Amount     | : 0         |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |
| Sample Info        | : 95-2193;MW-16;Water                 |                   |             |

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(303) 425-6021

Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-17   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08736  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714011 |

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | 0.006                        | 0.004      |

|                        |            |                    |               |
|------------------------|------------|--------------------|---------------|
| Temperature            | : 73.1 F   | Saturation Meth    | : 0.001504655 |
| Amount Injected        | : 0.5 ml   | Concentration      |               |
| Total Volume of Sample | : 43 ml    | Concentration Meth | : 0.004731042 |
| Head space created     | : 4 ml     | in Head Space      |               |
| Methane Area           | : 34.99 ug |                    |               |

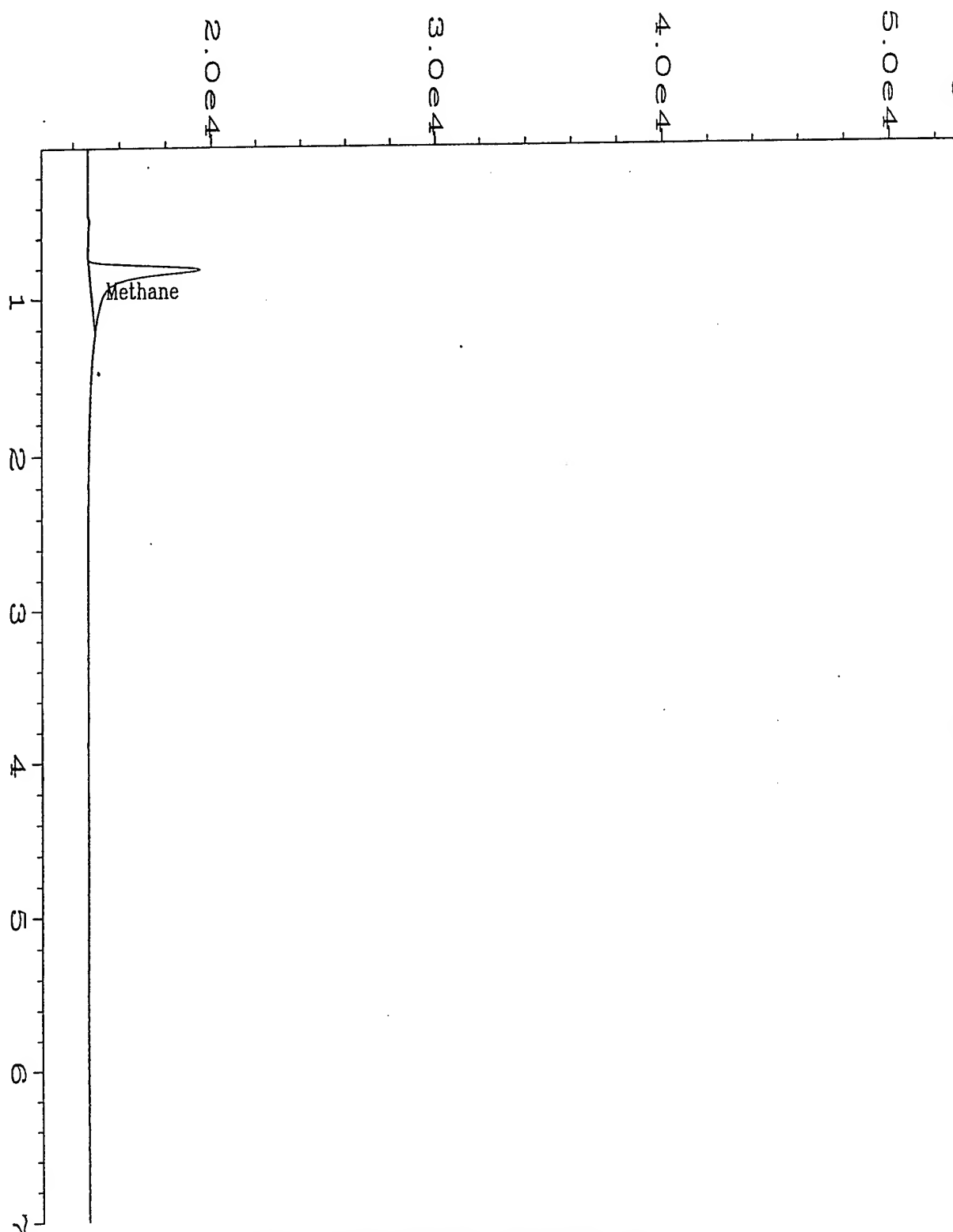
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\011R0101.D | Page Number       | : 1          |
| Operator           | : Bill Michener                       | Vial Number       | : 11         |
| Instrument         | : ALC/GAS                             | Injection Number  | : 1          |
| Sample Name        | : X08736;1                            | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : GASES      |
| quired on          | : 14 Jul 95 10:06 AM                  | Analysis Method   | : METH0714.1 |
| Report Created on: | : 14 Jul 95 01:59 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-17;Water                 |                   |              |

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Methane Report Form

|                         |              |                    |              |
|-------------------------|--------------|--------------------|--------------|
| Client Sample Number    | : MW-17      | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08736Dupl | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95    | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95    | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95    | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95    | Lab File No.       | : GAS0714012 |

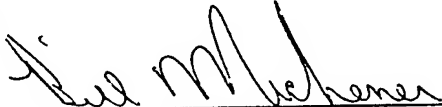
| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | 0.005                        | 0.004      |

|                        |             |                    |             |
|------------------------|-------------|--------------------|-------------|
| Temperature            | : 73 F      | Saturation Meth    | 0.001133888 |
| Amount Injected        | : 0.5 ml    | Concentration      |             |
| Total Volume of Sample | : 43 ml     | Concentration Meth | 0.00356592  |
| Head space created     | : 4 ml      | in Head Space      |             |
| Methane Area           | : 26.368 ug |                    |             |

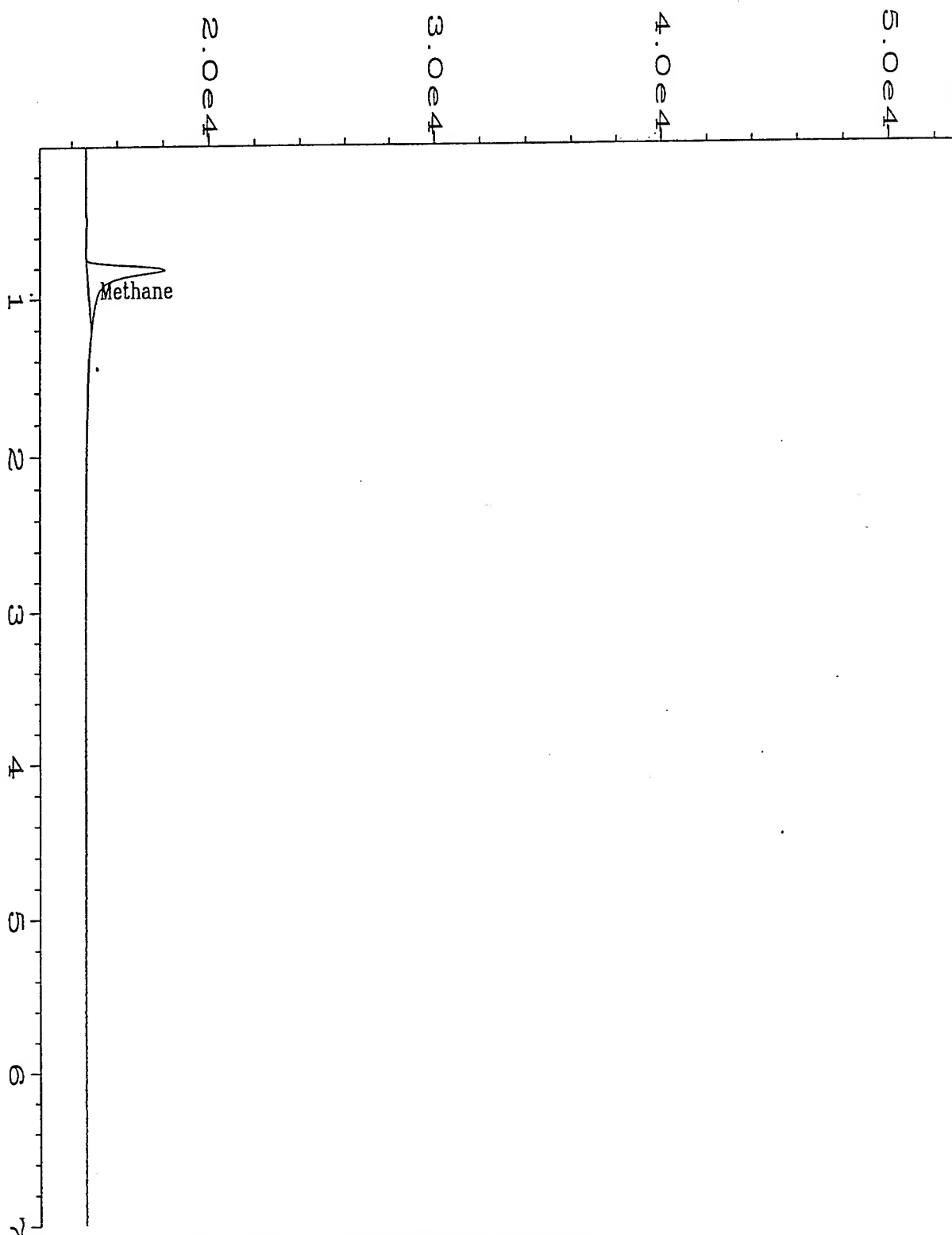
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
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|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\012R0101.D | Page Number       | : 1          |
| Operator           | : Bill Michener                       | Vial Number       | : 12         |
| Instrument         | : ALC/GAS                             | Injection Number  | : 1          |
| Sample Name        | : X08736Dupl;1                        | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : GASES      |
| quired on          | : 14 Jul 95 10:14 AM                  | Analysis Method   | : METH0714.1 |
| Report Created on: | : 14 Jul 95 01:59 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-17;Water                 |                   |              |

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(303) 425-6021

Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-15   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08737  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714013 |

| Compound Name | Cas Number | Sample<br>Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|---------------------------------|------------|
| Methane       | 74-82-8    | U                               | 0.004      |

|                        |          |               |      |   |
|------------------------|----------|---------------|------|---|
| Temperature            | : 71.9 F | Saturation    | Meth | 0 |
| Amount Injected        | : 0.5 ml | Concentration |      |   |
| Total Volume of Sample | : 43 ml  | Concentration | Meth | C |
| Head space created     | : 4 ml   | in Head Space |      |   |
| Methane Area           | : 0 ug   |               |      |   |

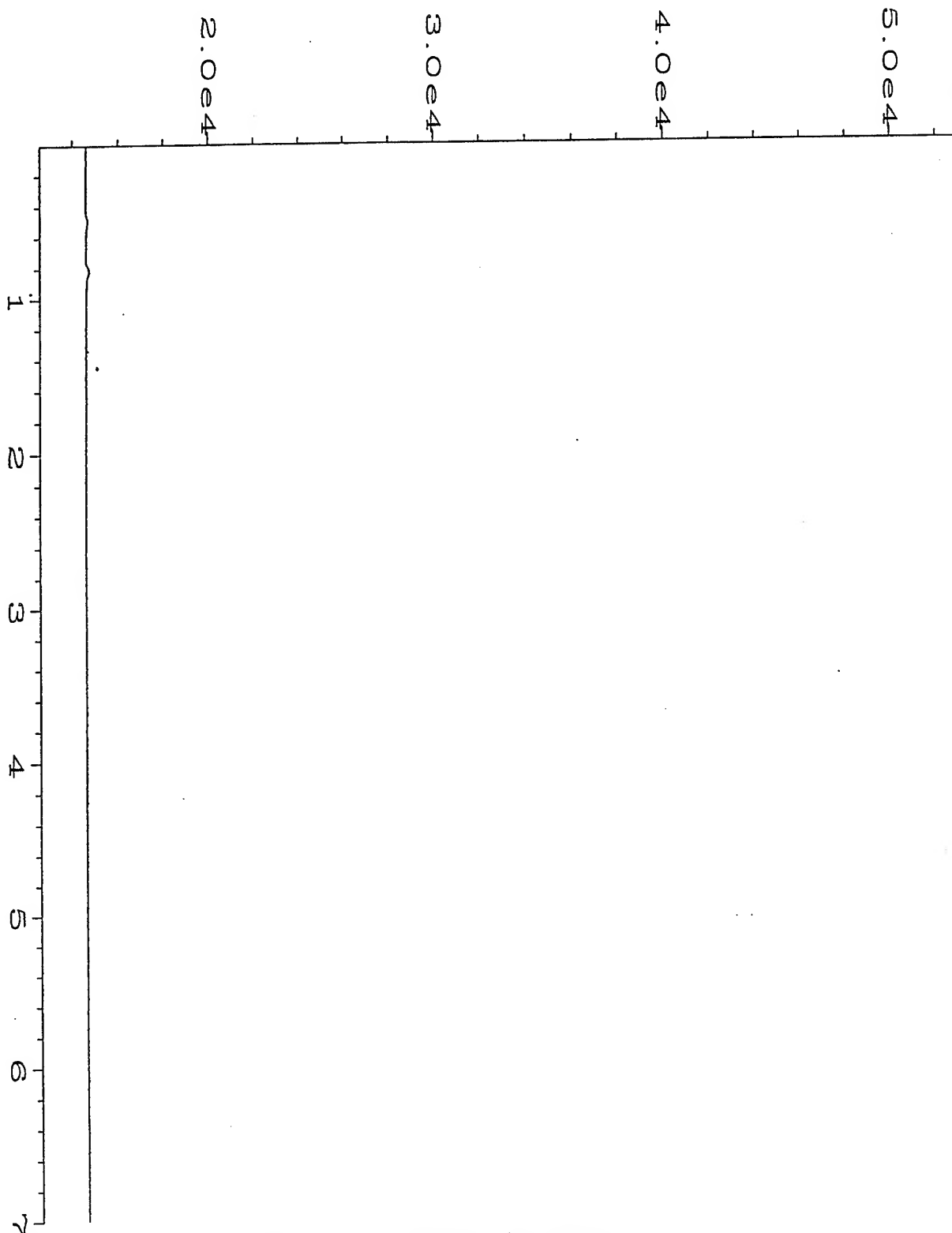
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
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|                      |                                       |                   |          |
|----------------------|---------------------------------------|-------------------|----------|
| Data File Name       | : C:\HPCHEM\2\DATA\GAS0714\013R0101.D | Page Number       | : 1      |
| Operator             | : Bill Michener                       | Vial Number       | : 13     |
| Instrument           | : ALC/GAS                             | Injection Number  | : 1      |
| Sample Name          | : X08737;1                            | Sequence Line     | : 1      |
| Print Time Bar Code: |                                       | Instrument Method | : GASES  |
| Printed on           | : 14 Jul 95 10:22 AM                  | Analysis Method   | : METH07 |
| Report Created on:   | : 14 Jul 95 01:59 PM                  | Sample Amount     | : 0      |
| Last Recalib on      | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :        |
| Multiplier           | : 1                                   |                   |          |
| Sample Info          | : 95-2193;MW-15;Water                 |                   |          |

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Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-14   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08738  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714014 |


| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | U                            | 0.004      |

|                        |          |               |      |   |
|------------------------|----------|---------------|------|---|
| Temperature            | : 72.2 F | Saturation    | Meth | 0 |
| Amount Injected        | : 0.5 ml | Concentration |      |   |
| Total Volume of Sample | : 43 ml  | Concentration | Meth | 0 |
| Head space created     | : 4 ml   | in Head Space |      |   |
| Methane Area           | : 0 ug   |               |      |   |

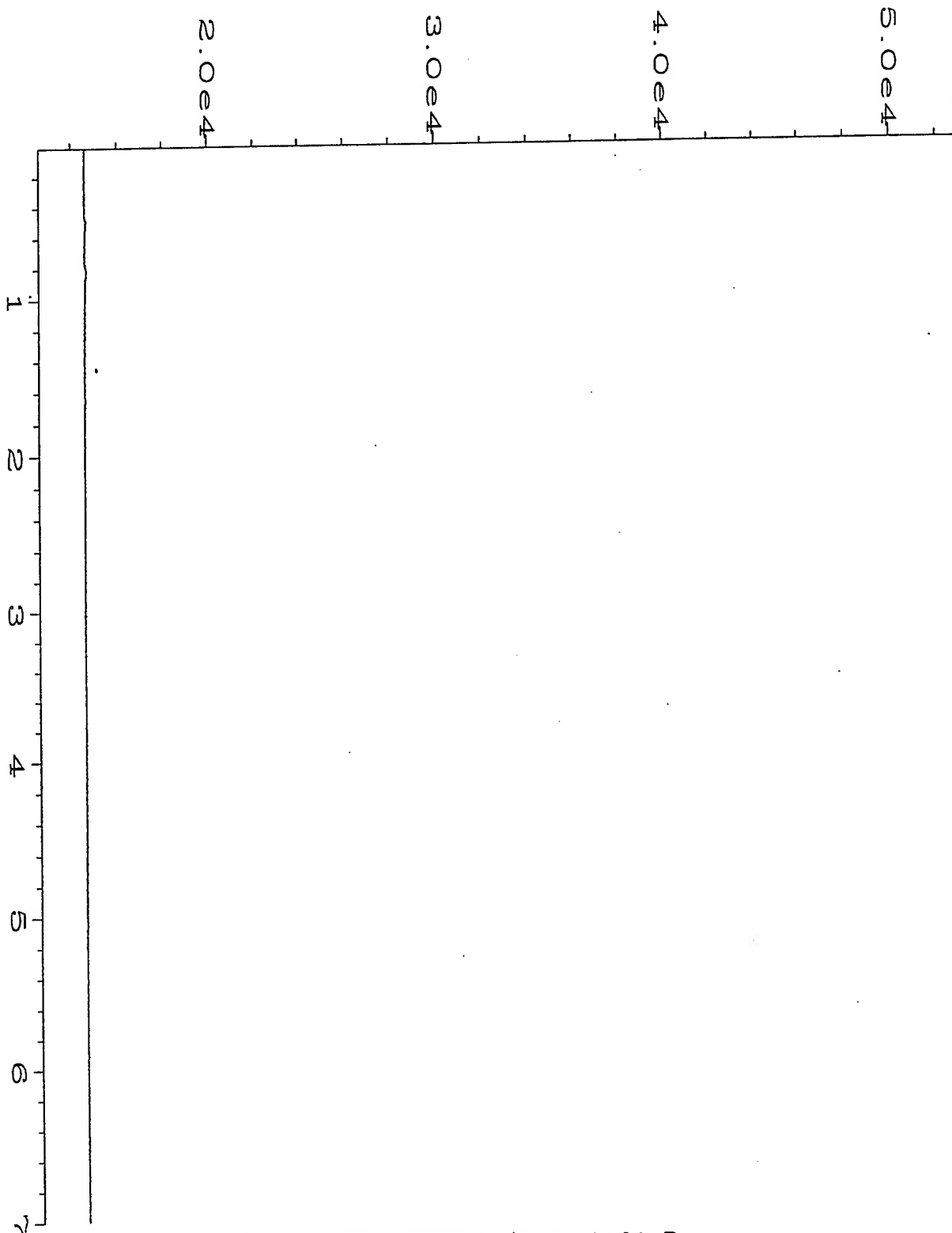
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                   |          |
|--------------------|---------------------------------------|-------------------|----------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\014R0101.D | Page Number       | : 1      |
| Operator           | : Bill Michener                       | Vial Number       | : 14     |
| Instrument         | : ALC/GAS                             | Injection Number  | : 1      |
| Sample Name        | : X08738;1                            | Sequence Line     | : 1      |
| Run Time Bar Code: |                                       | Instrument Method | : GASES  |
| quired on          | : 14 Jul 95 10:31 AM                  | Analysis Method   | : METH07 |
| Report Created on: | : 14 Jul 95 01:59 PM                  | Sample Amount     | : 0      |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :        |
| Multiplier         | : 1                                   |                   |          |
| Sample Info        | : 95-2193;MW-14;Water                 |                   |          |

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Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-19   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08739  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714015 |


| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | 0.046                        | 0.004      |

|                        |              |                    |               |
|------------------------|--------------|--------------------|---------------|
| Temperature            | : 72.7 F     | Saturation Meth    | : 0.011132209 |
| Amount Injected        | : 0.5 ml     | Concentration      |               |
| Total Volume of Sample | : 43 ml      | Concentration Meth | : 0.035028995 |
| Head space created     | : 4 ml       | in Head Space      |               |
| Methane Area           | : 258.874 ug |                    |               |

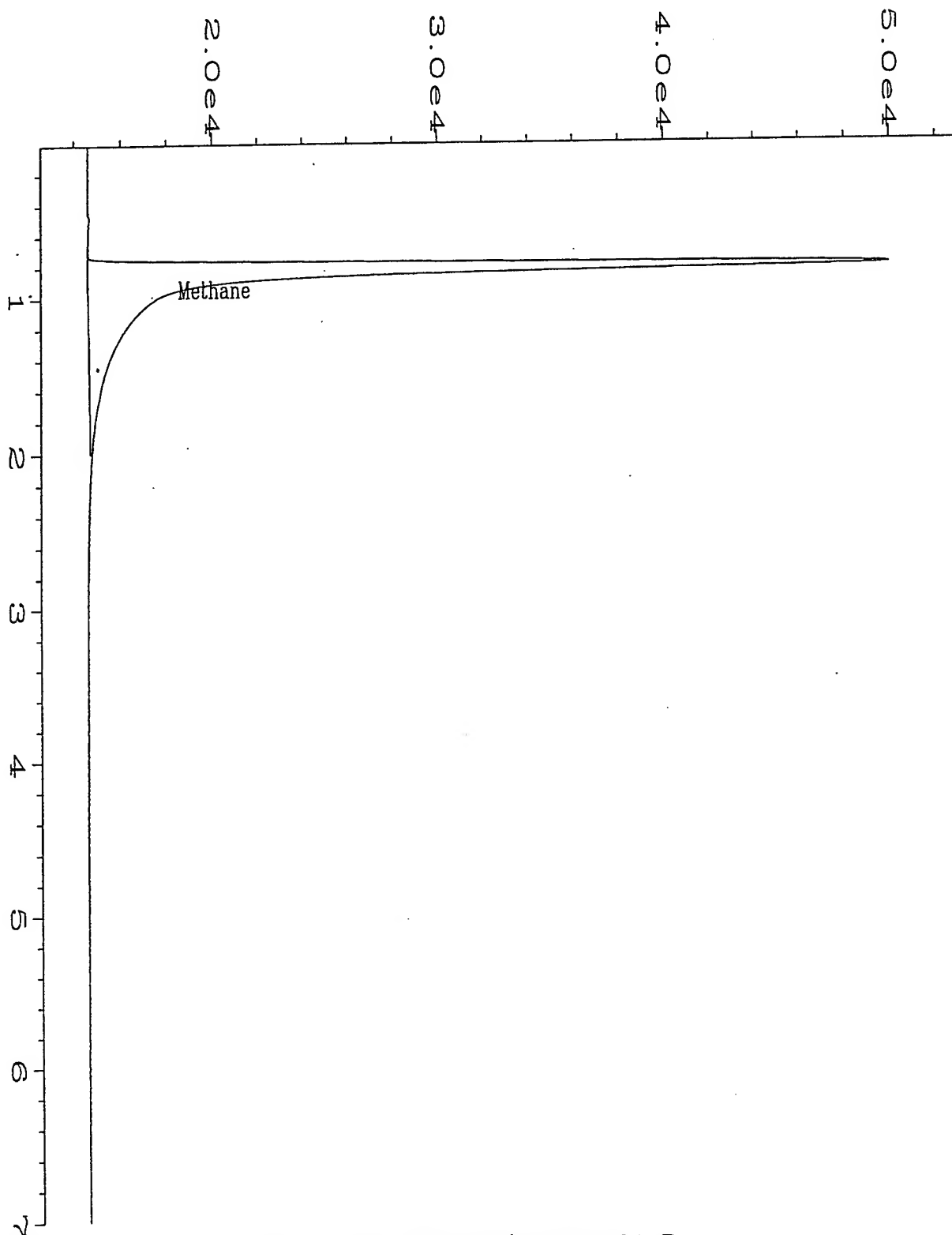
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                   |          |
|--------------------|---------------------------------------|-------------------|----------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\015R0101.D | Page Number       | : 1      |
| Operator           | : Bill Michener                       | Vial Number       | : 15     |
| Instrument         | : ALC/GAS                             | Injection Number  | : 1      |
| Sample Name        | : X08739;1                            | Sequence Line     | : 1      |
| Run Time Bar Code: |                                       | Instrument Method | : GASES  |
| quired on          | : 14 Jul 95 10:38 AM                  | Analysis Method   | : METH07 |
| Report Created on: | : 14 Jul 95 01:59 PM                  | Sample Amount     | : 0      |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :        |
| Multiplier         | : 1                                   |                   |          |
| Sample Info        | : 95-2193;MW-19;Water                 |                   |          |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

Methane Report Form

Client Sample Number : MW-18  
Lab Sample Number : X08740  
Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Extracted/Prepared : 7/14/95  
Date Analyzed : 7/14/95

Client Project No. : 722450.26  
Lab Project No. : 95-2193  
Dilution Factor : 1.00  
Method : RSKSOP-175  
Matrix : Water  
Lab File No. : GAS0714016

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | U                            | 0.004      |

|                        |          |               |      |   |
|------------------------|----------|---------------|------|---|
| Temperature            | : 73 F   | Saturation    | Meth | 0 |
| Amount Injected        | : 0.5 ml | Concentration |      |   |
| Total Volume of Sample | : 43 ml  | Concentration | Meth | 0 |
| Head space created     | : 4 ml   | in Head Space |      |   |
| Methane Area           | : 0 ug   |               |      |   |

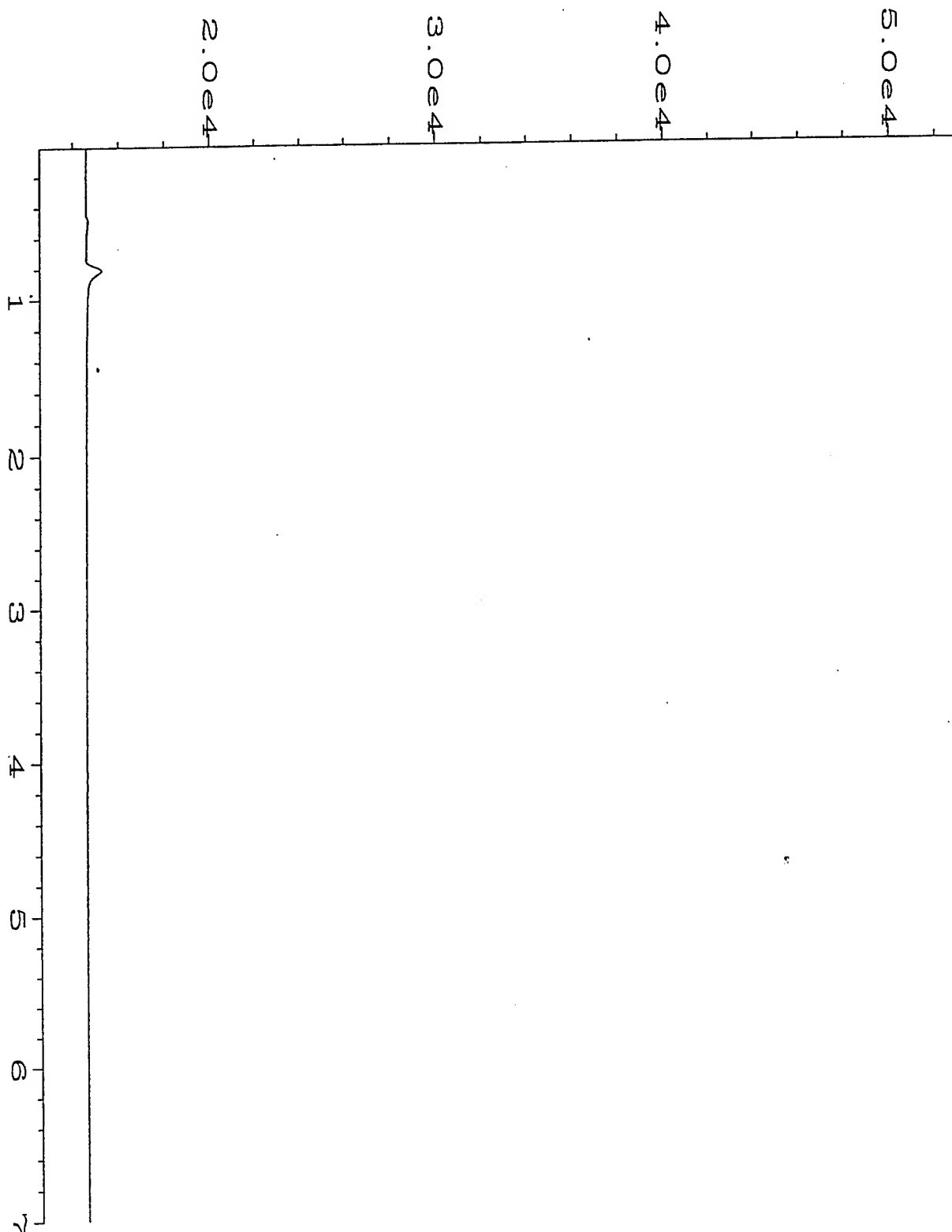
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\016R0101.D | Page Number       | : 1          |
| Operator           | : Bill Michener                       | Vial Number       | : 16         |
| Instrument         | : ALC/GAS                             | Injection Number  | : 1          |
| Sample Name        | : X08740;1                            | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : GASES      |
| quired on          | : 14 Jul 95 10:46 AM                  | Analysis Method   | : METH0714.D |
| Report Created on: | 14 Jul 95 01:59 PM                    | Sample Amount     | : 0          |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-2193;MW-18;Water                 |                   |              |

EVERGREEN ANALYTICAL, INC.  
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Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-20   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08741  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714017 |

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | U                            | 0.004      |

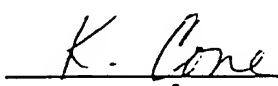
|                        |          |                    |   |
|------------------------|----------|--------------------|---|
| Temperature            | : 72.9 F | Saturation Meth    | 0 |
| Amount Injected        | : 0.5 ml | Concentration      |   |
| Total Volume of Sample | : 43 ml  | Concentration Meth | 0 |
| Head space created     | : 4 ml   | in Head Space      |   |
| Methane Area           | : 0 ug   |                    |   |

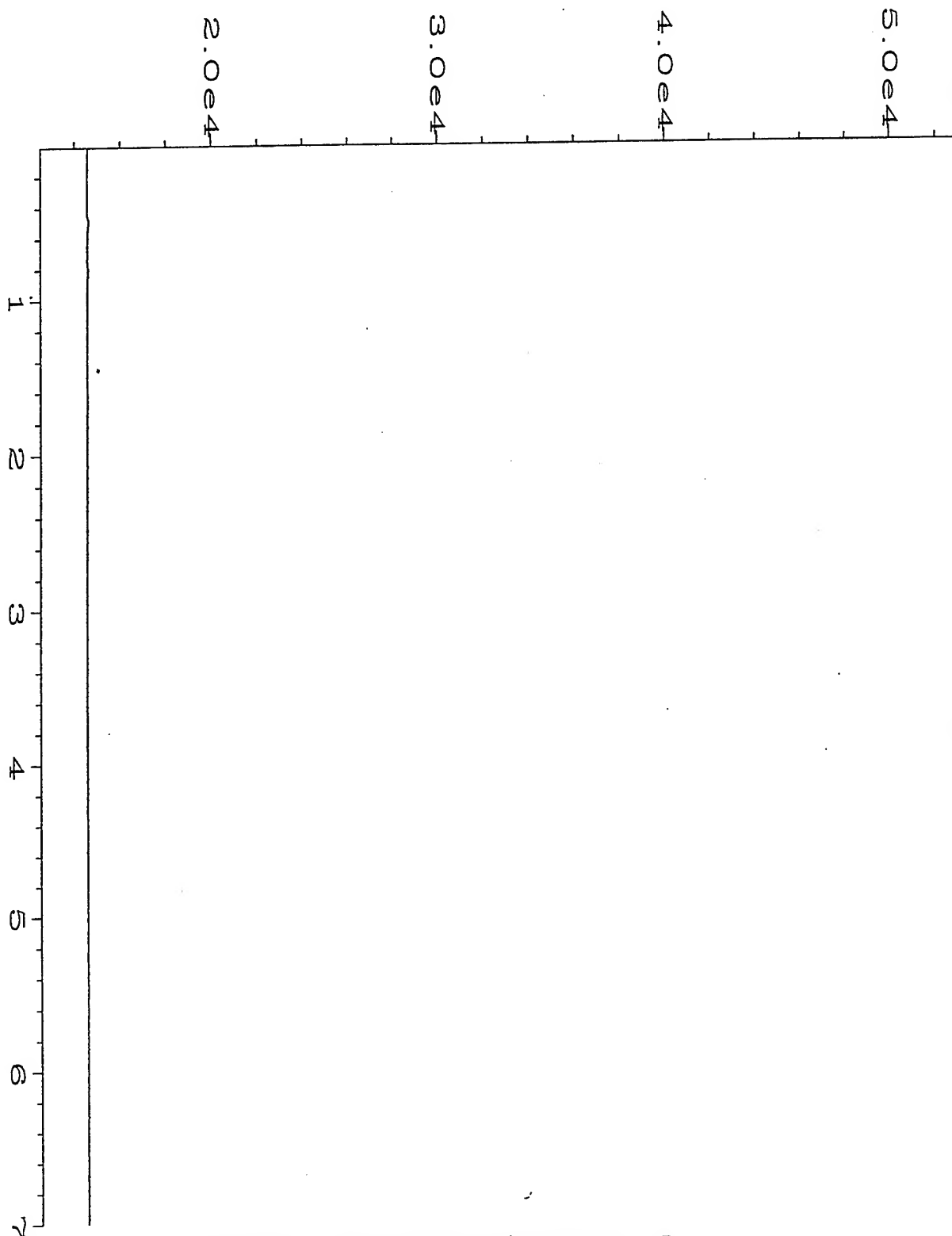
Atomic weight(Methane) : 16 g

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                   |          |
|--------------------|---------------------------------------|-------------------|----------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\017R0101.D | Page Number       | : 1      |
| Operator           | : Bill Michener                       | Vial Number       | : 17     |
| Instrument         | : ALC/GAS                             | Injection Number  | : 1      |
| Sample Name        | : X08741;1                            | Sequence Line     | : 1      |
| Run Time Bar Code: |                                       | Instrument Method | : GASES  |
| quired on          | : 14 Jul 95 10:56 AM                  | Analysis Method   | : METH07 |
| Report Created on: | : 14 Jul 95 01:59 PM                  | Sample Amount     | : 0      |
| Last Recalib on    | : 14 JUL 95 09:05 AM                  | ISTD Amount       | :        |
| Multiplier         | : 1                                   |                   |          |
| Sample Info        | : 95-2193;MW-20;Water                 |                   |          |

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

RSK-175 Gas Method  
Methane Gas Matrix Spike / Matrix Spike Duplicate Report

|                              |           |                    |                  |
|------------------------------|-----------|--------------------|------------------|
| Client Sample No.            | : MW-15   | Client Project No. | : 722450.26      |
| Lab Sample No.               | : X08737  | Lab Project No.    | : 95-2193        |
| Date Sampled                 | : 7/10/95 | EPA Method No.     | : RSK-175        |
| Date Received                | : 7/11/95 | Matrix             | : Water          |
| Date Prepared                | : 7/14/95 | Method Blank       | : GB071495       |
| Date Analyzed                | : 7/14/95 | Lab File No's.     | : GAS0714024,025 |
| E.A. MS/MSD Spike Source No. | : 1723    |                    |                  |

| Compound    | Spike Added (mg/L) | Sample Concentration (mg/L) | MS Concentration (mg/L) | MS %REC | QC Limits %REC |
|-------------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Methane Gas | 500                | 0                           | 331                     | 66      | N/A            |

| Compound    | Spike Added (mg/L) | MSD Concentration (mg/L) | MSD %REC | RPD | QC Limits |      |
|-------------|--------------------|--------------------------|----------|-----|-----------|------|
|             |                    |                          |          |     | RPD       | %REC |
| Methane Gas | 500                | 328                      | 66       | 1.7 | N/A       | N/A  |


RPD: 0 out of (1) outside limits.  
Spike Recovery: 0 out of (2) outside limits.

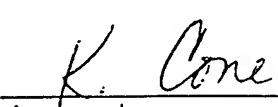
NOTES:

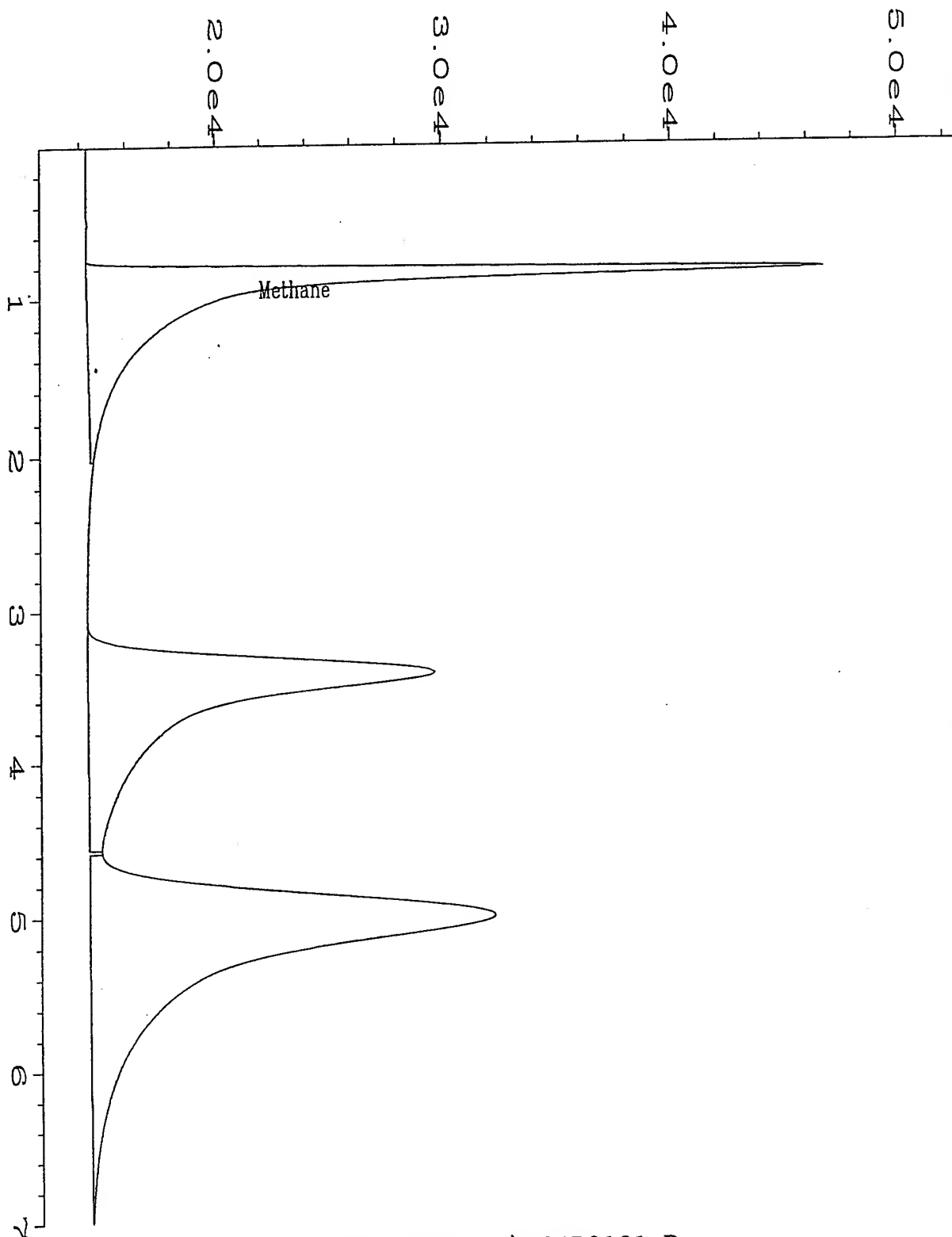
\* = Values outside of QC limits.

NA = Not analyzed/not available

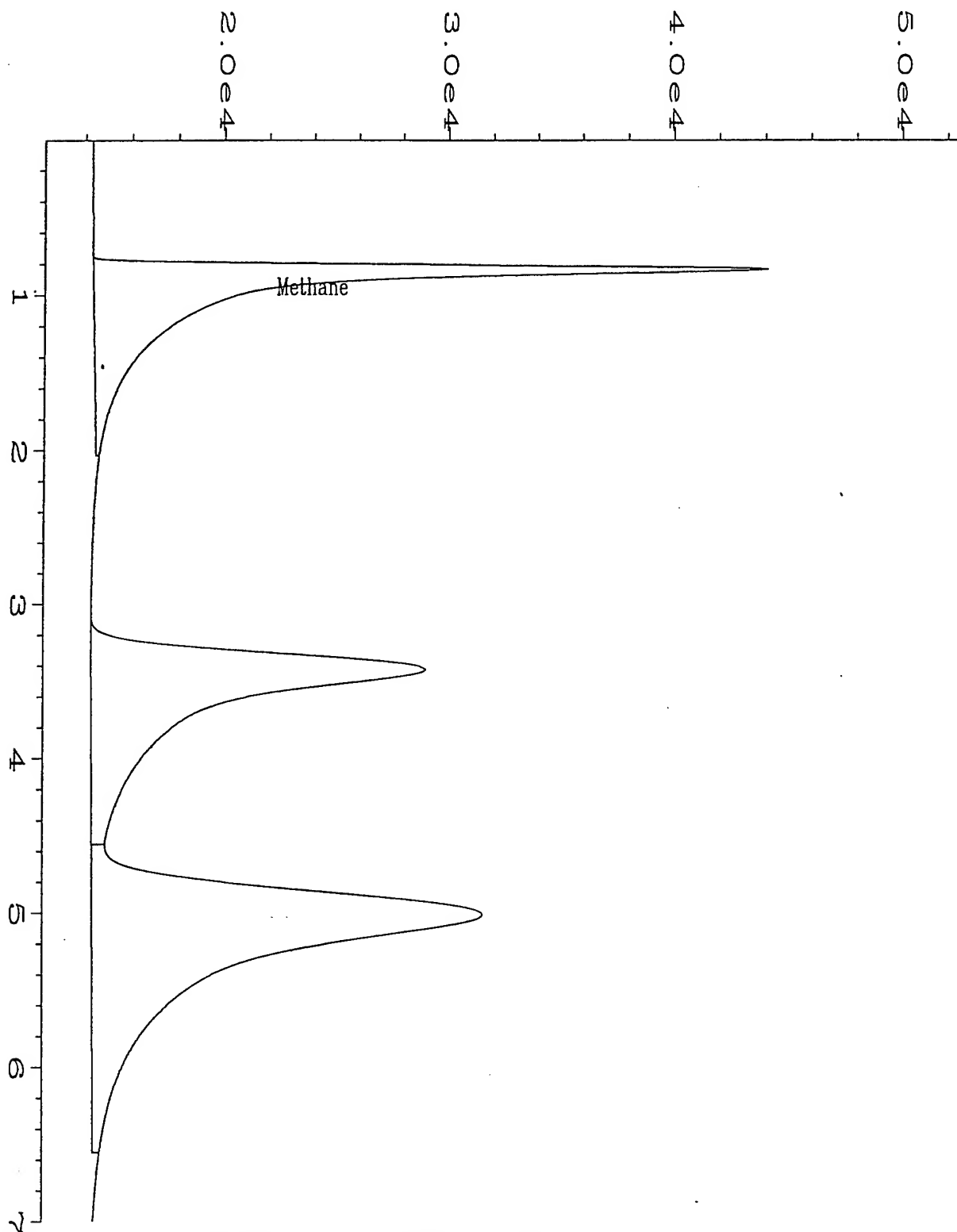
Note: The Spike was made by taking the sample and displacing 4ml of headspace with a 1% methane gas and shaking the VOA for 5 minutes. Then injecting 50 ul from the headspace into the GC resulting in a theoretical concentration of 500 ppm.

  
Analyst

  
Approved



|                    |   |                   |              |
|--------------------|---|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\024R0101.D                                   | Page Number       | : 1          |
| Operator           | : Bill Michener   | Vial Number       | : 24         |
| Instrument         | : ALC/GAS   | Injection Number  | : 1          |
| Sample Name        | : X08737MS;1  | Sequence Line     | : 1          |
| Run Time Bar Code: |   | Instrument Method | : GASES      |
| quired on          | : 14 Jul 95 12:59 PM  | Analysis Method   | : METH0714.1 |
| Report Created on: | : 14 Jul 95 02:00 PM  | Sample Amount     | : 0          |
| Last Recalib on    | : 14 JUL 95 09:05 AM  | ISTD Amount       | :            |
| Multiplier         | : 1   |                   |              |
| Sample Info        | : 95-2193;MW-15;1%(4mlHeadSpace) inject 50ul(500ppm Matrix Spike) Water |                   |              |



|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\025R0101.D                                   | Page Number       | : 1            |
| Operator           | : Bill Michener   | Vial Number       | : 25           |
| Instrument         | : ALC/GAS   | Injection Number  | : 1            |
| Sample Name        | : X08737MSDupl;1  | Sequence Line     | : 1            |
| Run Time Bar Code: |   | Instrument Method | : GASES.MTH    |
| Acquired on        | : 14 Jul 95 01:32 PM  | Analysis Method   | : METH0714.MTH |
| Report Created on  | : 14 Jul 95 02:00 PM  | Sample Amount     | : 0            |
| Last Recalib on    | : 14 JUL 95 09:05 AM  | ISTD Amount       | :              |
| Multiplier         | : 1   |                   |                |
| Sample Info        | : 95-2193;MW-15;1%(4mlHeadSpace) inject 50ul(500ppm Matrix Spike) Water |                   |                |

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

RSK-175 Gas Method  
Methane LCS Report Form

LCS No. : LCS071495      EPA Method No. : RSK-175  
Date Prepared : 7/14/95      Matrix : Water  
Date Analyzed : 7/14/95      Method Blank : GB071495  
E.A. LCS Source No. : 1723      Lab File No. : GAS0714009

| Compound    | Spike Added (mg/L) | Method Blank Concentration (mg/L) | LCS Concentration (mg/L) | LCS %REC | QC Limits %REC |
|-------------|--------------------|-----------------------------------|--------------------------|----------|----------------|
| Methane Gas | 500                | 0                                 | 548                      | 110      | N/A            |


Spike Recovery: 0 out of (1) outside limits.

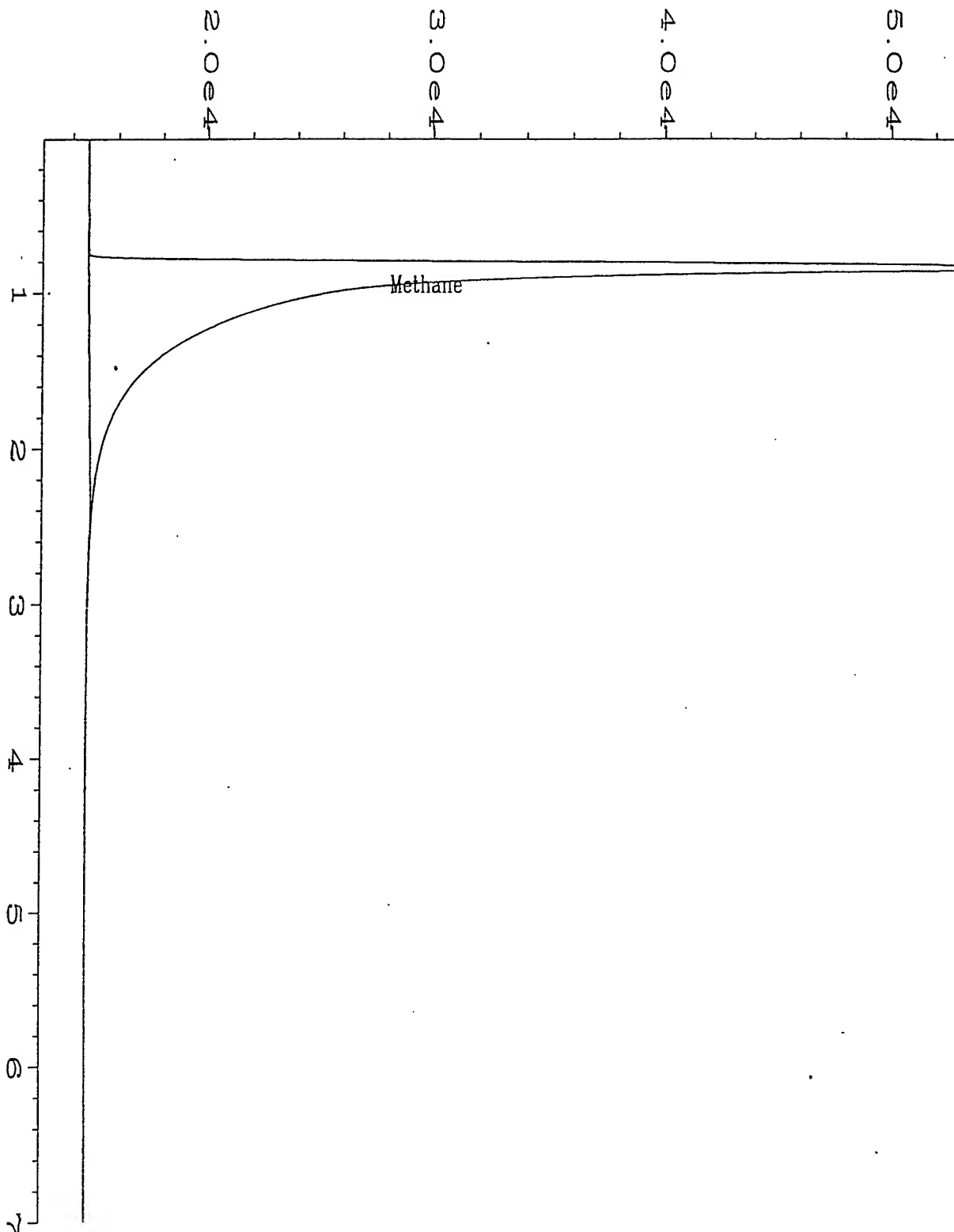
NOTES:

\* = Values outside of QC limits.

NA = Not analyzed/not applicable.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |  |                    |                |
|--------------------|--|--------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\GAS0714\009R0101.D  | Page Number        | : 1            |
| Operator           | : Bill Michener                        | Vial Number        | : 9            |
| Instrument         | : ALC/GAS                              | Injection Number   | : 1            |
| Sample Name        | : LCS071495;Gas                        | Sequence Line      | : 1            |
| Run Time Bar Code: |  | Instrument Method: | GASES.MTH      |
| Acquired on        | : 14 Jul 95 09:04 AM                   | Analysis Method    | : METH0714.MTH |
| Report Created on: | 14 Jul 95 01:59 PM                     | Sample Amount      | : 0            |
| Last Recalib on    | : 14 JUL 95 09:05 AM                   | ISTD Amount        | :              |
| Multiplier         | : 1                                    |                    |                |
| Sample Info        | : Methane(500ppm) 50 ul from 1% Scotty |                    |                |

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(303)425-6021

Anions

Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Prepared : 7/11/95  
Date Analyzed : 7/11/95

Client Project ID. : 722450.26  
Lab Project No. : 95-2193  
Method : EPA 300.0  
Matrix : Water  
Detection Limit : 0.25 mg/L

| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Chloride (mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|------------------------|------------------------|
| X08735                              | MW-16                             | 5.6                    | 1X                     |
| X08736                              | MW-17                             | 12.1                   | 1X                     |
| X08737                              | MW-15                             | 13.9                   | 1X                     |
| X08738                              | MW-14                             | 7.9                    | 1X                     |
| X08739                              | MW-19                             | 9.7                    | 1X                     |
| X08740                              | MW-18                             | 12.7                   | 1X                     |
| X08741                              | MW-20                             | 12.3                   | 1X                     |

Method Blank (7/11/95) <0.25

Quality Assurance

|        |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|--------|---------------------------|--|---|--|-----------------------------|
| X08741 | Matrix Spike<br>MW-20     | 10.0   | 12.3  | 22.8   | 105                         |
| X08741 | Matrix Spike Dup<br>MW-20 | 10.0   | 12.3  | 23.4   | 111                         |
|        | MS/MSD RPD                |  |   |  | 5.4                         |

Debra J. Byrum  
Analyst

M. Wild  
Approved

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

Anions

|                         |                                |
|-------------------------|--------------------------------|
| Date Sampled : 7/10/95  | Client Project ID. : 722450.26 |
| Date Received : 7/11/95 | Lab Project No. : 95-2193      |
| Date Prepared : 7/11/95 | Method : EPA 300.0             |
| Date Analyzed : 7/11/95 | Matrix : Water                 |
|                         | Detection Limit : 0.076 mg/L   |

| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Nitrite-N(mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|------------------------|------------------------|
| X08735                              | MW-16                             | <0.076                 | 1X                     |
| X08736                              | MW-17                             | <0.076                 | 1X                     |
| X08737                              | MW-15                             | <0.076                 | 1X                     |
| X08738                              | MW-14                             | <0.076                 | 1X                     |
| X08739                              | MW-19                             | <0.076                 | 1X                     |
| X08740                              | MW-18                             | <0.076                 | 1X                     |
| X08741                              | MW-20                             | <0.076                 | 1X                     |
| Method Blank (7/11/95)              |                                   | <0.076                 |                        |

Quality Assurance\*\*

|            |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|------------|---------------------------|--|---|--|-----------------------------|
| X08741     | Matrix Spike<br>MW-20     | 10.0   | <0.25   | 10.0   | 100                         |
| X08741     | Matrix Spike Dup<br>MW-20 | 10.0   | <0.25   | 9.5  | 95                          |
| MS/MSD RPD |                           |  |   |  | 4.9                         |

\*\* = Quality assurance results reported as Nitrite (NO<sub>2</sub>).

Debra J. Byrum  
Analyst

[Signature]  
Approved

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Anions

Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Prepared : 7/11/95  
Date Analyzed : 7/11/95

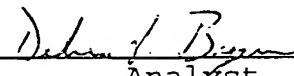
Client Project ID. : 722450.26  
Lab Project No. : 95-2193  
Method : EPA 300.0  
Matrix : Water  
Detection Limit : 0.056 mg/L

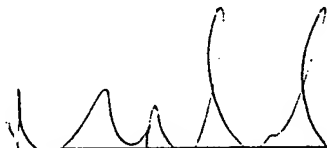
| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Nitrate-N(mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|------------------------|------------------------|
| X08735                              | MW-16                             | <0.056                 | 1X                     |
| X08736                              | MW-17                             | 0.36                   | 1X                     |
| X08737                              | MW-15                             | 0.10                   | 1X                     |
| X08738                              | MW-14                             | <0.056                 | 1X                     |
| X08739                              | MW-19                             | 0.076                  | 1X                     |
| X08740                              | MW-18                             | 1.7                    | 1X                     |
| X08741                              | MW-20                             | 1.7                    | 1X                     |
| Method Blank (7/11/95)              |                                   | <0.056                 |                        |

Quality Assurance\*\*

|        |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|--------|---------------------------|--|---|--|-----------------------------|
| X08741 | Matrix Spike<br>MW-20     | 10.0   | 7.6   | 17.4   | 98                          |
| X08741 | Matrix Spike Dup<br>MW-20 | 10.0   | 7.6   | 17.2   | 95                          |
|        | MS/MSD RPD                |  |   |  | 2.3                         |

\*\* = Quality assurance results reported as Nitrate (NO<sub>3</sub>).

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
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Anions

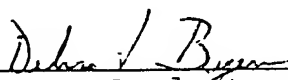
|                         |                                |
|-------------------------|--------------------------------|
| Date Sampled : 7/10/95  | Client Project ID. : 722450.26 |
| Date Received : 7/11/95 | Lab Project No. : 95-2193      |
| Date Prepared : 7/11/95 | Method : EPA 300.0             |
| Date Analyzed : 7/11/95 | Matrix : Water                 |
|                         | Detection Limit : 0.25 mg/L    |

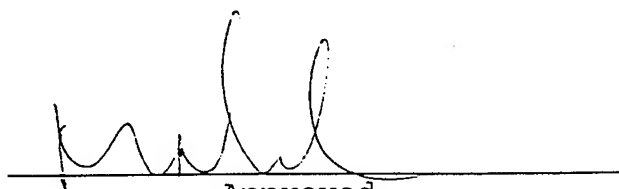
| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Sulfate (mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|-----------------------|------------------------|
| X08735                              | MW-16                             | 4.2                   | 1X                     |
| X08736                              | MW-17                             | 2.9                   | 1X                     |
| X08737                              | MW-15                             | 5.0                   | 1X                     |
| X08738                              | MW-14                             | 11.8                  | 1X                     |
| X08739                              | MW-19                             | 37.9                  | 1X                     |
| X08740                              | MW-18                             | 12.4                  | 1X                     |
| X08741                              | MW-20                             | 13.6                  | 1X                     |

Method Blank (7/11/95) <0.25

Quality Assurance

|        |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|--------|---------------------------|--|---|--|-----------------------------|
| X08741 | Matrix Spike<br>MW-20     | 10.0   | 13.6  | 23.6   | 100                         |
| X08741 | Matrix Spike Dup<br>MW-20 | 10.0   | 13.6  | 23.8   | 102                         |
|        | MS/MSD RPD                |  |   |  | 1.7                         |

  
Analyst

  
Approved

**FAX**Evergreen Analytical Inc  
4036 Youngfield St  
Wheat Ridge, CO 80033Date 7/19/95  
Number of pages including cover sheet 13

To:

Todd Wiedemeier

From:

Patty McClellanPhone 303-831-8100Fax Phone 303-831-8208

CC:

Phone 303-425-6021Fax Phone 303-425-6854

REMARKS:

☐ Urgent☒ For your review☐ Reply ASAP☐ Please comment

*Todd,*  
*This fax is being sent in two*  
*portions of 13 pages each. Please call if*  
*you do not receive 26 pages total.*

*Thanks,*  
*Patty*

*Seymour Johnson data.*

## Evergreen Analytical Sample Log Sheet

Project # 95-2193Date(s) Sampled: 07/10/95 COCDate Due: 07/18/95-UST  
07/25/95-ANIONSs Received: 07/11/95 0920Holding Time(s): 07/12-NO2,NO3  
07/17-TEH;07/24-BTEX,TVH  
Rush STANDARDClient Project I.D. 722450.26 Seymour JohnsonClient: PARSONS ENGINEERING SCIENCEAddress: 1700 BROADWAY, SUITE 900DENVER, CO 80290Contact: TODD WIEDEMEIER

Client P.O. \_\_\_\_\_

Phone #831-8100 Fax #831-8208Shipping Charges N/AE.A. Cooler # 475Airbill # FED EX 6475871920Custody Seal Intact? N/A

Cooler \_\_\_\_\_ Bottles \_\_\_\_\_

COC Present

Sample Tags Present?

Sample Tags Listed?

Sample(s) Sealed?

Y  
Y  
Y  
Y

Special Invoicing/Billing \_\_\_\_\_

Special Instructions ✓ 1 SAMPLE BROKEN IN TRANSIT. ★ ALL BTEX ARE TO INCLUDE  
CHLOROBENZENE, TMB AND TEMB.

| Lab ID #  | Client ID# | Analysis | Mtx | Btl | Loc |
|-----------|------------|----------|-----|-----|-----|
| X08735A-C | MW-16      | ★ BTEX   | W   | 40V | 2   |
| X08736A-C | MW-17      | ★ BTEX   | W   | 40V | 2   |
| X08737A-C | MW-15      | ★ BTEX   | W   | 40V | 2   |
| X08738A-C | MW-14      | ★ BTEX   | W   | 40V | 2   |
| X08739A-C | MW-19      | ★ BTEX   | W   | 40V | 2   |
| X08740A-C | MW-18      | ★ BTEX   | W   | 40V | 2   |
| X08741A-C | MW-20      | ★ BTEX   | W   | 40V | 2   |
| X08742A-C | MW-21      | ★ BTEX   | W   | 40V | 2   |
| X08743A-C | TRIP BLANK | ★ BTEX   | W   | 40V | 2   |
| X08735D-F | MW-16      | TVH      | W   | 40V | 2   |
| X08736D-F | MW-17      | TVH      | W   | 40V | 2   |
| X08737D-F | MW-15      | TVH      | W   | 40V | 2   |
| X08738D-F | MW-14      | TVH      | W   | 40V | 2   |
| X08739D-F | MW-19      | TVH      | W   | 40V | 2   |
| X08740D-F | MW-18      | TVH      | W   | 40V | 2   |

R = Samples to be returned

Route GC/MS \_\_\_\_\_ GC 5 Metals \_\_\_\_\_ Wet Chem 1 SxPrep 1 Acctg 1SxRec C XXXXXXXXXX C Sales C File Orig

| Lab #    | Client ID# | Analysis  | Mtx | Btl  | Loc |
|----------|------------|---|-----|------|-----|
| 41D/E    | MW-20      | ✓ TVH   | W   | 40V  | 2   |
| 08735G-I | MW-16      | METHANE   | W   | 40V  | 2   |
| 08736G-I | MW-17      | METHANE   | W   | 40V  | 2   |
| 08737G-I | MW-15      | METHANE   | W   | 40V  | 2   |
| 08738G-I | MW-14      | METHANE   | W   | 40V  | 2   |
| 08739G-I | MW-19      | METHANE   | W   | 40V  | 2   |
| 08740G-I | MW-18      | METHANE   | W   | 40V  | 2   |
| 08741G-I | MW-20      | METHANE   | W   | 40V  | 2   |
| 08735J   | MW-16      | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| 08736J   | MW-17      | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| 08737J   | MW-15      | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| 08738J   | MW-14      | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| 08739J   | MW-19      | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| 08740J   | MW-18      | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| 08741J   | MW-20      | Cl <sup>-</sup> , NO <sub>2</sub> , NO <sub>3</sub> , SO <sub>4</sub> | W   | 125P | C3  |
| 08735K   | MW-16      | TEH   | W   | 11A  | C3  |
| 08736K   | MW-17      | TEH   | W   | 11A  | C3  |
| 08737K   | MW-15      | TEH   | W   | 11A  | C3  |
| 08738K   | MW-14      | TEH   | W   | 11A  | C3  |
| 08739K   | MW-19      | TEH   | W   | 11A  | C3  |
| 08740K   | MW-18      | TEH   | W   | 11A  | C3  |
| 08741K   | MW-20      | TEH   | W   | 11A  | C3  |

Project # 94-2193

Page 2 of 2 Pages

R=Sample to be returned



EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Method 602 Data Report

|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-16   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08735  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071113 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                     | Sample Concentration ug/L | RL ug/L              |
|---|--------------------------------|---------------------------|----------------------|
| Benzene   | 71-43-2                        | U                         | 0.4                  |
| Toluene   | 108-88-3                       | U                         | 0.4                  |
| Chlorobenzene   | 108-90-7                       | U                         | 0.4                  |
| Ethyl Benzene   | 100-41-4                       | U                         | 0.4                  |
| Total Xylenes (m, p & o)  | 108-38-3, 106-42-3 and 95-47-6 | U                         | 0.4                  |
| 3,5-Trimethylbenzene  | 108-67-8                       | U                         | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                        | U                         | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                       | U                         | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                       | U                         | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                | 96%                       | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

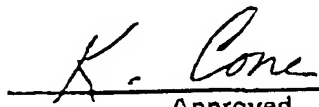
E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Method 602 Data Report


|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-17   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08736  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071114 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 37                           | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 87%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Method 602 Data Report

|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-15   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08737  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071115 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 86%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Method 602 Data Report

|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-14   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08738  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071116 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 87%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
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(303) 425-6021

## Method 602 Data Report

Client Sample Number : MW-19  
Lab Sample Number : X08739  
Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Prepared : 7/11/95  
Date Analyzed : 7/11/95

Client Project No. : 722450.26  
Lab Project No. : 95-2193  
Dilution Factor : 1.00  
Method : 602  
Matrix : Water  
Lab File No. : BX1071117  
Method Blank No. : MB1071195

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 94%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

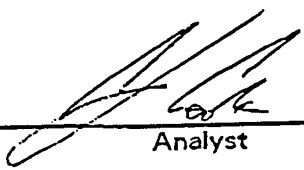
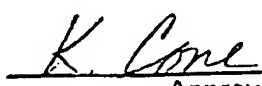
E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst  
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4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Method 602 Data Report

|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-18   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08740  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/11/95 | Lab File No.       | : BX1071118 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 3,5-Trimethylbenzene  | 108-67-8                          | 1.0                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 83%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:


E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst  
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(303) 425-6021

## Method 602 Data Report

|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-20   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08741  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/12/95 | Lab File No.       | : BX1071120 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | 1.1                             | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 80%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

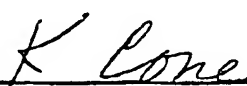
E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
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(303) 425-6021

## Method 602 Data Report

|                      |           |                    |             |
|----------------------|-----------|--------------------|-------------|
| Client Sample Number | : MW-21   | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08742  | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95 | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95 | Method             | : 602       |
| Date Prepared        | : 7/11/95 | Matrix             | : Water     |
| Date Analyzed        | : 7/12/95 | Lab File No.       | : BX1071121 |
|                      |           | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | 0.8                          | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 3,5-Trimethylbenzene  | 108-67-8                          | 1.1                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 84%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

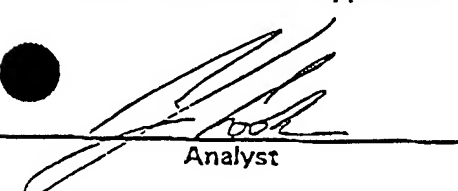
E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
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## Method 602 Data Report

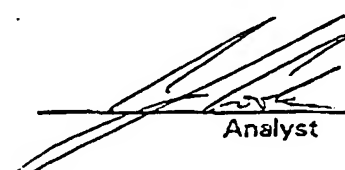
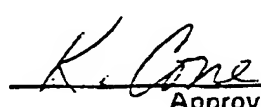
|                      |              |                    |             |
|----------------------|--------------|--------------------|-------------|
| Client Sample Number | : Trip Blank | Client Project No. | : 722450.26 |
| Lab Sample Number    | : X08743     | Lab Project No.    | : 95-2193   |
| Date Sampled         | : 7/10/95    | Dilution Factor    | : 1.00      |
| Date Received        | : 7/11/95    | Method             | : 602       |
| Date Prepared        | : 7/11/95    | Matrix             | : Water     |
| Date Analyzed        | : 7/12/95    | Lab File No.       | : BX1071123 |
|                      |              | Method Blank No.   | : MB1071195 |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.5                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 72%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

## QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
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(303) 425-6021

## TOTAL VOLATILE HYDROCARBONS (TVH-GASOLINE)

Date Sampled : 7/10/95 Client Project Number : 722450.26  
Date Received : 7/11/95 Lab Project Number : 95-2193  
Date Prepared : 7/12/95 Matrix : Water  
Method Number : EPA 5030/8015 Modified

| Evergreen<br>Sample # | Client<br>Sample # | Analysis<br>Date | Surrogate<br>Recovery | Result<br>mg/L | RL<br>mg/L |
|-----------------------|--------------------|------------------|-----------------------|----------------|------------|
| MB071195              | METHOD BLANK       | 7/12/95          | 100%                  | U              | 0.1        |
| X08741                | MW-20              | 7/12/95          | 102%                  | U              | 0.1        |
| X08735                | MW-16              | 7/12/95          | 103%                  | U              | 0.1        |
| X08736                | MW-17              | 7/12/95          | 102%                  | 0.1            | 0.1        |
| X08737                | MW-15              | 7/12/95          | 102%                  | U              | 0.1        |
| X08738                | MW-14              | 7/12/95          | 101%                  | U              | 0.1        |
| X08739                | MW-19              | 7/12/95          | 101%                  | U              | 0.1        |
| X08740                | MW-18              | 7/12/95          | 99%                   | U              | 0.1        |


## QUALIFIERS

U = TVH analyzed for but not detected.

B = TVH found in blank also.

E = Extrapolated value. Exceeds calibration range.

RL = Reporting Limit.

  
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4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

## TOTAL EXTRACTABLE HYDROCARBONS (TEH as Jet Fuel)

|               |              |                       |                 |
|---------------|--------------|-----------------------|-----------------|
| Date Sampled  | : 7/10/95    | Client Project Number | : 722450.26     |
| Date Received | : 7/11/95    | Lab Project Number    | : 95-2193       |
| Date Prepared | : 7/11/95    | Matrix                | : Water         |
| Date Analyzed | : 7/13,14/95 | Method Number         | : 3500/Mod.8015 |

| Evergreen<br>Sample # | Client<br>Sample # | Surrogate<br>Recovery | TEH<br>Jet Fuel<br>mg/L | RL<br>mg/L |
|-----------------------|--------------------|-----------------------|-------------------------|------------|
| WB071195              | WATER METHOD BLANK | 91%                   | U                       | 0.5        |
| X08735                | MW-16              | 102%                  | U                       | 0.5        |
| X08736                | MW-17              | 97%                   | U                       | 0.5        |
| X08737                | MW-15              | 81%                   | U                       | 0.5        |
| X08738                | MW-14              | 83%                   | U                       | 0.5        |
| X08739                | MW-19              | 97%                   | U                       | 0.5        |
| X08740                | MW-18              | 89%                   | U                       | 0.5        |
| X08741                | MW-20              | 93%                   | U                       | 0.5        |

## QUALIFIERS

U = TEH as Jet Fuel analyzed for but not detected.

B = TEH as Jet Fuel found in blank also.

E = Extrapolated value.

RL = Reporting Limit

  
Analyst  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-16   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08735  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714010 |


| Compound Name | Cas Number | Sample<br>Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|---------------------------------|------------|
| Methane       | 74-82-8    | 0.142                           | 0.004      |

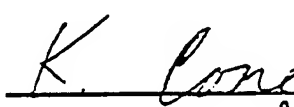
|                        |              |                    |               |
|------------------------|--------------|--------------------|---------------|
| Temperature            | : 73 F       | Saturation Meth    | : 0.034148524 |
| Amount Injected        | : 0.5 ml     | Concentration      |               |
| Total Volume of Sample | : 43 ml      | Concentration Meth | : 0.107392382 |
| Head space created     | : 4 ml       | in Head Space      |               |
| Methane Area           | : 794.107 ug |                    |               |

Atomic weight(Methane) : 16 g

## QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved

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(303) 425-6021

## Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-17   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08736  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714011 |

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | 0.006                        | 0.004      |

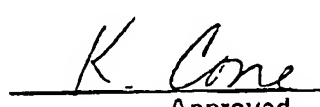
|                        |            |                    |              |
|------------------------|------------|--------------------|--------------|
| Temperature            | : 73.1 F   | Saturation Meth    | : 0.0015     |
| Amount Injected        | : 0.5 ml   | Concentration      |              |
| Total Volume of Sample | : 43 ml    | Concentration Meth | : 0.00473104 |
| Head space created     | : 4 ml     | in Head Space      |              |
| Methane Area           | : 34.99 ug |                    |              |

Atomic weight(Methane) : 16 g

## QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved

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4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-15   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08737  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714013 |

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | U                            | 0.004      |

|                        |          |                             |     |
|------------------------|----------|-----------------------------|-----|
| Temperature            | : 71.9 F | Saturation Meth             | : 0 |
| Amount Injected        | : 0.5 ml | Concentration Meth          | : 0 |
| Total Volume of Sample | : 43 ml  | Concentration in Head Space | : 0 |
| Head space created     | : 4 ml   |                             |     |
| Methane Area           | : 0 ug   |                             |     |

Atomic weight(Methane) : 16 g

## QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

Bill M. Schaner  
Analyst

K. Cone  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Methane Report Form

Client Sample Number : MW-14  
Lab Sample Number : X08738  
Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Extracted/Prepared : 7/14/95  
Date Analyzed : 7/14/95

Client Project No. : 722450.26  
Lab Project No. : 95-2193  
Dilution Factor : 1.00  
Method : RSKSOP-175  
Matrix : Water  
Lab File No. : GAS0714014

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | U                            | 0.004      |

Temperature : 72.2 F  
Amount Injected : 0.5 ml  
Total Volume of Sample : 43 ml  
Head space created : 4 ml  
Methane Area : 0 ug

Saturation Meth  
Concentration  
Concentration Meth  
in Head Space

Atomic weight(Methane) : 16 g

## QUALIFIERS:


E = Extrapolated value.

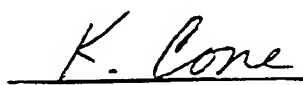
U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

## Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-19   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08739  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714015 |

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | 0.046                        | 0.004      |

|                        |              |                    |               |
|------------------------|--------------|--------------------|---------------|
| Temperature            | : 72.7 F     | Saturation Meth    | : 0.011132209 |
| Amount Injected        | : 0.5 ml     | Concentration      |               |
| Total Volume of Sample | : 43 ml      | Concentration Meth | : 0.035028995 |
| Head space created     | : 4 ml       | in Head Space      |               |
| Methane Area           | : 258.874 ug |                    |               |

Atomic weight(Methane) : 16 g

## QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

K. M. McChesney  
Analyst

K. Cone  
Approved

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(303) 425-6021

## Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-18   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08740  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714016 |

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | U                            | 0.004      |

|                        |   |        |
|------------------------|---|--------|
| Temperature            | : | 73 F   |
| Amount Injected        | : | 0.5 ml |
| Total Volume of Sample | : | 43 ml  |
| Head space created     | : | 4 ml   |
| Methane Area           | : | 0 ug   |

|               |      |  |
|---------------|------|--|
| Saturation    | Meth |  |
| Concentration |      |  |
| Concentration | Meth |  |
| in Head Space |      |  |

Atomic weight(Methane) : 16 g

## QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved

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## Methane Report Form

|                         |           |                    |              |
|-------------------------|-----------|--------------------|--------------|
| Client Sample Number    | : MW-20   | Client Project No. | : 722450.26  |
| Lab Sample Number       | : X08741  | Lab Project No.    | : 95-2193    |
| Date Sampled            | : 7/10/95 | Dilution Factor    | : 1.00       |
| Date Received           | : 7/11/95 | Method             | : RSKSOP-175 |
| Date Extracted/Prepared | : 7/14/95 | Matrix             | : Water      |
| Date Analyzed           | : 7/14/95 | Lab File No.       | : GAS0714017 |

| Compound Name | Cas Number | Sample Concentration<br>mg/L | RL<br>mg/L |
|---------------|------------|------------------------------|------------|
| Methane       | 74-82-8    | U                            | 0.004      |

|                        |          |                    |   |
|------------------------|----------|--------------------|---|
| Temperature            | : 72.9 F | Saturation Meth    | 0 |
| Amount Injected        | : 0.5 ml | Concentration      |   |
| Total Volume of Sample | : 43 ml  | Concentration Meth | 0 |
| Head space created     | : 4 ml   | in Head Space      |   |
| Methane Area           | : 0 ug   |                    |   |

Atomic weight(Methane) : 16 g

## QUALIFIERS:


E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved

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(303) 425-6021

Anions

|                         |                                |
|-------------------------|--------------------------------|
| Date Sampled : 7/10/95  | Client Project ID. : 722450.26 |
| Date Received : 7/11/95 | Lab Project No. : 95-2193      |
| Date Prepared : 7/11/95 | Method : EPA 300.0             |
| Date Analyzed : 7/11/95 | Matrix : Water                 |
|                         | Detection Limit : 0.25 mg/L    |

| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Chloride (mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|------------------------|------------------------|
| X08735                              | MW-16                             | 5.6                    | 1X                     |
| X08736                              | MW-17                             | 12.1                   | 1X                     |
| X08737                              | MW-15                             | 13.9                   | 1X                     |
| X08738                              | MW-14                             | 7.9                    | 1X                     |
| X08739                              | MW-19                             | 9.7                    | 1X                     |
| X08740                              | MW-18                             | 12.7                   | 1X                     |
| X08741                              | MW-20                             | 12.3                   | 1X                     |

Method Blank (7/11/95) <0.25

Quality Assurance

|        |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|--------|---------------------------|--|---|--|-----------------------------|
| X08741 | Matrix Spike<br>MW-20     | 10.0   | 12.3  | 22.8   | 105                         |
| X08741 | Matrix Spike Dup<br>MW-20 | 10.0   | 12.3  | 23.4   | 111                         |
|        | MS/MSD RPD                |  |   |  | 5.4                         |

Analyst

Approved

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(303) 425-6021

Anions

|                         |                                |
|-------------------------|--------------------------------|
| Date Sampled : 7/10/95  | Client Project ID. : 722450.26 |
| Date Received : 7/11/95 | Lab Project No. : 95-2193      |
| Date Prepared : 7/11/95 | Method : EPA 300.0             |
| Date Analyzed : 7/11/95 | Matrix : Water                 |
|                         | Detection Limit : 0.076 mg/L   |

| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Nitrite-N(mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|------------------------|------------------------|
| X08735                              | MW-16                             | <0.076                 | 1X                     |
| X08736                              | MW-17                             | <0.076                 | 1X                     |
| X08737                              | MW-15                             | <0.076                 | 1X                     |
| X08738                              | MW-14                             | <0.076                 | 1X                     |
| X08739                              | MW-19                             | <0.076                 | 1X                     |
| X08740                              | MW-18                             | <0.076                 | 1X                     |
| X08741                              | MW-20                             | <0.076                 | 1X                     |

Method Blank (7/11/95) <0.076

Quality Assurance\*\*

|        |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|--------|---------------------------|--|---|--|-----------------------------|
| X08741 | Matrix Spike<br>MW-20     | 10.0   | <0.25   | 10.0   | 100                         |
| X08741 | Matrix Spike Dup<br>MW-20 | 10.0   | <0.25   | 9.5  | 95                          |
|        | MS/MSD RPD                |  |   |  | 4.9                         |

\*\* = Quality assurance results reported as Nitrite (NO<sub>2</sub>).

Debra J. Byrum  
Analyst

[Signature]  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Anions

Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Prepared : 7/11/95  
Date Analyzed : 7/11/95

Client Project ID. : 722450.26  
Lab Project No. : 95-2193  
Method : EPA 300.0  
Matrix : Water  
Detection Limit : 0.056 mg/L

| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Nitrate-N(mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|------------------------|------------------------|
| X08735                              | MW-16                             | <0.056                 | 1X                     |
| X08736                              | MW-17                             | 0.36                   | 1X                     |
| X08737                              | MW-15                             | 0.10                   | 1X                     |
| X08738                              | MW-14                             | <0.056                 | 1X                     |
| X08739                              | MW-19                             | 0.076                  | 1X                     |
| X08740                              | MW-18                             | 1.7                    | 1X                     |
| X08741                              | MW-20                             | 1.7                    | 1X                     |

Method Blank (7/11/95)

<0.056

Quality Assurance\*\*

|        |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|--------|---------------------------|--|---|--|-----------------------------|
| X08741 | Matrix Spike<br>MW-20     | 10.0   | 7.6   | 17.4   | 98                          |
| X08741 | Matrix Spike Dup<br>MW-20 | 10.0   | 7.6   | 17.2   | 95                          |
|        | MS/MSD RPD                |  |   |  | 2.3                         |

\*\* = Quality assurance results reported as Nitrate (NO<sub>3</sub>).

Debra L. Byers  
Analyst

[Signature]  
Approved

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(303) 425-6021

Anions

Date Sampled : 7/10/95  
Date Received : 7/11/95  
Date Prepared : 7/11/95  
Date Analyzed : 7/11/95

Client Project ID. : 722450.26  
Lab Project No. : 95-2193  
Method : EPA 300.0  
Matrix : Water  
Detection Limit : 0.25 mg/L

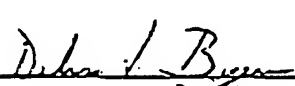
| <u>Evergreen</u><br><u>Sample #</u> | <u>Client</u><br><u>Sample ID</u> | <u>Sulfate (mg/L)</u> | <u>Dilution Factor</u> |
|-------------------------------------|-----------------------------------|-----------------------|------------------------|
| X08735                              | MW-16                             | 4.2                   | 1X                     |
| X08736                              | MW-17                             | 2.9                   | 1X                     |
| X08737                              | MW-15                             | 5.0                   | 1X                     |
| X08738                              | MW-14                             | 11.8                  | 1X                     |
| X08739                              | MW-19                             | 37.9                  | 1X                     |
| X08740                              | MW-18                             | 12.4                  | 1X                     |
| X08741                              | MW-20                             | 13.6                  | 1X                     |


Method Blank (7/11/95)

<0.25

Quality Assurance

|        |                           | <u>Spike</u><br><u>Amount</u><br><u>(mg/L)</u> | <u>Sample</u><br><u>Result</u><br><u>(mg/L)</u> | <u>Spike</u><br><u>Result</u><br><u>(mg/L)</u> | <u>%</u><br><u>Recovery</u> |
|--------|---------------------------|--|---|--|-----------------------------|
| X08741 | Matrix Spike<br>MW-20     | 10.0   | 13.6  | 23.6   | 100                         |
| X08741 | Matrix Spike Dup<br>MW-20 | 10.0   | 13.6  | 23.8   | 102                         |
|        | MS/MSD RPD                |  |   |  | 1.7                         |

  
Analyst

  
Approved

2193cm.25



Evergreen

May 16, 1995

MR TODD WIEDEMEIER  
PARSONS ENGINEERING SCIENCE INC  
1700 BROADWAY SUITE 900  
DENVER CO 80290

Data Reports : 95-1182, 1217, 1240, 1264  
Client Project : 722450.SCO2  
Seymour Johnson AFB

Dear Mr. Wiedemeier:

Enclosed are the analytical results for the samples shown in the Sample Log Sheet. The enclosed data have been reviewed for quality assurance. If you have any questions concerning the reported information, please contact Patty McClellan, Program Manager, or me.

**Please Note:** Samples marked for return on the Sample Log Sheet are considered hazardous, unsuitable for municipal disposal or were placed on hold at your request. Samples considered hazardous or unsuitable for municipal disposal will be returned to you immediately. Samples placed on hold will be returned and samples not considered hazardous will be disposed of one (1) month from the date of this letter.

The invoice for this work will be mailed to your Accounts Payable department shortly.

Thank you for using the services of Evergreen Analytical.

Sincerely,

*J. A. Barney* by *pm*  
Jack Barney  
President

TM



## CASE NARRATIVE

Evergreen Analytical Laboratory (EAL) Projects:  
95-1182, 95-1217, 95-1240 and 95-1264

Parsons Engineering Science, Inc. (PES) Project:  
Seymour Johnson AFB (722450.2602)

### Sample Receipt

Between April 12 and 19, 1995, soil and groundwater samples were received at EAL for analysis under Subcontract 722450.SC02. Soil samples were received in coring tubes, and were non-homogeneous in nature. The problems associated with receiving samples in coring tubes was discussed with Todd Wiedemeier of PES on April 13, and it was agreed that samples would not be sent in tubes in future sampling events. Refer to the EAL Check-in Record for specific information regarding the condition of samples upon receipt. Refer to the EAL Sample Log Sheet for specific log-in information and cross-reference of EAL and PES sample identifications.

### Data Package

All data are reported in one comprehensive package that is segregated based upon EAL project number. Each EAL project represents a group of samples received on a given day. The EAL Sample Log Sheet summarizes the samples represented in each EAL project.

A separate invoice for each EAL project number will be generated.

Quality assurance data may overlap from one EAL project to another. All required matrix spike/matrix spike duplicate (MS/MSD) and laboratory duplicate samples were analyzed. Laboratory Control Samples (LCS) and Method Blanks were analyzed when required and also are included in the data package.

### BTEX, Trimethylbenzenes, Tetramethylbenzene, Chlorobenzene, Method SW8020

All samples were analyzed for BTEX within holding time.

Samples MW-2 9.5-10.5, MW-2 10.5-12, MW-4 12-13.5, SS-1 11.5-13.5, SS-1 11.5-13.5 Dupe, SS-3 9-11, SS-3 9-11 Dupe, MW-7, MW-11, CPT-16, CPT-17, CPT-18 MW-3, MW-4, MW-4 Dupe, MW-5, MW-5 Dupe, MW-8, MW-12D and MW-13 were analyzed at dilutions ranging from DF=5 to DF=125,000 due to concentrations of target compounds beyond the linear range of the instrument. All associated reporting limits have been raised accordingly.

Page Two  
Case Narrative  
Parsons Engineering Science

Target analytes were detected in Method Blanks MB042395, MB042495, MB042595 and Methanol Extraction Blanks MEB042395 and MEB2050295 at concentrations less than 1 ppb. The associated samples have been "B" flagged.

Sample MW-10 11-12 MS/MSD recoveries were within the EAL acceptance criteria.

The Relative Percent Difference (RPD) for all laboratory duplicate samples was within the PES acceptance criteria. RPDs for SS-1 11.5-13.5, SS-3 9-11 and their associated duplicates were poor due to non-homogeneous coring samples noted at sample receipt.

All Laboratory Control Samples (LCS) and surrogate recoveries were within the EAL quality control acceptance criteria.

A 1 ppb standard has been analyzed with each SW8020 analytical sequence. The standard is generally part of the initial calibration curve. The initial calibration procedure is currently being switched from one based on a correlation coefficient, to one based on instrument response factors. The data included in this data package may have been analyzed by either procedure. It is anticipated that future samples for SW8020 will all be calibrated using the response factor procedure. The SW8020 SOP is being revised, and will be forwarded upon completion.

GC/MS, Method 624

Samples were analyzed by GC/MS Method 624 with the addition of MTBE, EDB, isopropyl ether, chlorobenzene, 1,2-dichlorobenzene (1,2-DCB), 1,3-DCB, 1,4-DCB, dichlorodifluoromethane, and trichlorofluoromethane. All samples were analyzed within holding time with the exception of MW-11 which required a dilution due to the high concentration of target compounds. The original analysis was performed within holding time, however, the results of the diluted samples, analyzed one day outside of holding time are reported.

Contamination was detected in Method Blanks RB050195 and RB050295 at concentrations at or around the reporting limit. The associated samples have been "B" flagged. The data are considered acceptable.

Samples MW-11, CPT-18 and MW-4 were analyzed at dilutions due to levels of contaminations beyond linear range. The reporting limits have been adjusted accordingly.

MS/MSD samples were analyzed with MW-11 with acceptable recoveries.

All Laboratory Fortified Blanks, (LFB) were analyzed with acceptable recoveries.

As this analysis is not requested in the Scope of Work, only the BTEX and added compounds are reported in the electronic deliverables.

BNA (Full Suite), Method 625

Method 625 analysis was performed on one sample, however, is reported on hard copy only as it was not included in the Scope of Work. Laboratory duplicate and MS/MSD samples required by the Subcontract were not analyzed due to insufficient sample volume.

Bis(2-ethylhexyl)phthalate, 2-methylnaphthalene, and Di-n-butylphthalate were detected in the Method Blank at 1 ppb. The associated sample data are "B" flagged as necessary. The data are considered acceptable.

There are no other quality control anomalies to report.

Total Volatile Hydrocarbons (TVH), Method 8015M

All samples submitted for TVH were analyzed within holding times.

Samples MW2 9.5-10.5, MW2 10.5-12, MW4 12-13.5, SS-1 11.5-13.5, SS-3 9-11, MW-7, MW-11, CPT-15 and MW-4 were analyzed at dilutions due to contamination in the samples. The reporting limits have been adjusted accordingly.

The relative percent difference for both sets of duplicates and MS/MSD samples were poor, due to the non-homogenous samples noted at the time of sample receipt.

Total Extractable Hydrocarbons (TEH), Method 8015M

All samples submitted for TEH analysis were analyzed within holding times.

Samples MW2 9.5-10.5, MW2 10.5-12, MW4 12-13.5, SS-1 11.5-13.5 and SS-3 9-11 were analyzed at dilutions due to contamination in the samples. Reporting limits have been raised accordingly.

The surrogate recovery for CPT-17, MW-8 and MW-3 was low and re-run with similar results. The samples were not reprepared due to insufficient sample volume.

Total Organic Carbon

Total Organic Carbon (TOC) in soil was analyzed by Huffman Laboratories of Golden, Colorado. TOC was determined by analyzing for total carbon (TC) and inorganic (carbonate) carbon (CC), then calculating the difference as TOC. Percent moisture results were applied to determine the adjusted result. The report from Huffman is included.

Page Four  
Case Narrative  
Parsons Engineering Science

Methane, Method RSKSOP-175

There are no quality control anomalies to report.

Metals (Pb), Method 6010

There are no quality control anomalies to report.

General Chemistry

There are no quality control anomalies to report for Alkalinity or Anion analyses.

Disk Deliverables

The disk deliverables are included with the hard copy package. Matrix spike, matrix spike duplicate and laboratory duplicate samples are not included on the disk. Please note that blank spaces in the laboratory detection limit and/or PQL column indicate that there is no detection limit or PQL for that analyte.

Reporting limits have been adjusted to reflect the percent moisture in all soil samples or increases due to dilutions.

A hard copy of each spreadsheet included on the diskette is included. The name for each spreadsheet is located in the top left corner on the first page of each spreadsheet printout.

  
\_\_\_\_\_  
Patricia A. McClellan, Project Manager



EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Methanol Blank Report

Method Blank Number : MEB042295  
Date Extracted/Prepared : 4/22/95  
Date Analyzed : 4/22/95  
% Moisture : NA

Client Project No. : 722450.2602/SJ AFE  
Lab Project No. : 95-1182  
Dilution Factor : 125.00  
Method : 602/8020  
Matrix : Water/MeOH  
Lab File No. : BX2042215

| Compound Name               | Cas Number                        | Sample Concentration<br>ug/kg | RL<br>ug/kg |
|-----------------------------|-----------------------------------|-------------------------------|-------------|
| Benzene                     | 71-43-2                           | U                             | 500         |
| Toluene                     | 108-88-3                          | U                             | 500         |
| Chlorobenzene               | 108-90-7                          | U                             | 500         |
| Ethyl Benzene               | 100-41-4                          | U                             | 500         |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | U                             | 500         |
| .3,5-Trimethylbenzene       | 108-67-8                          | U                             | 500         |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | U                             | 500         |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | U                             | 500         |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | U                             | 500         |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 104% 70%-130% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

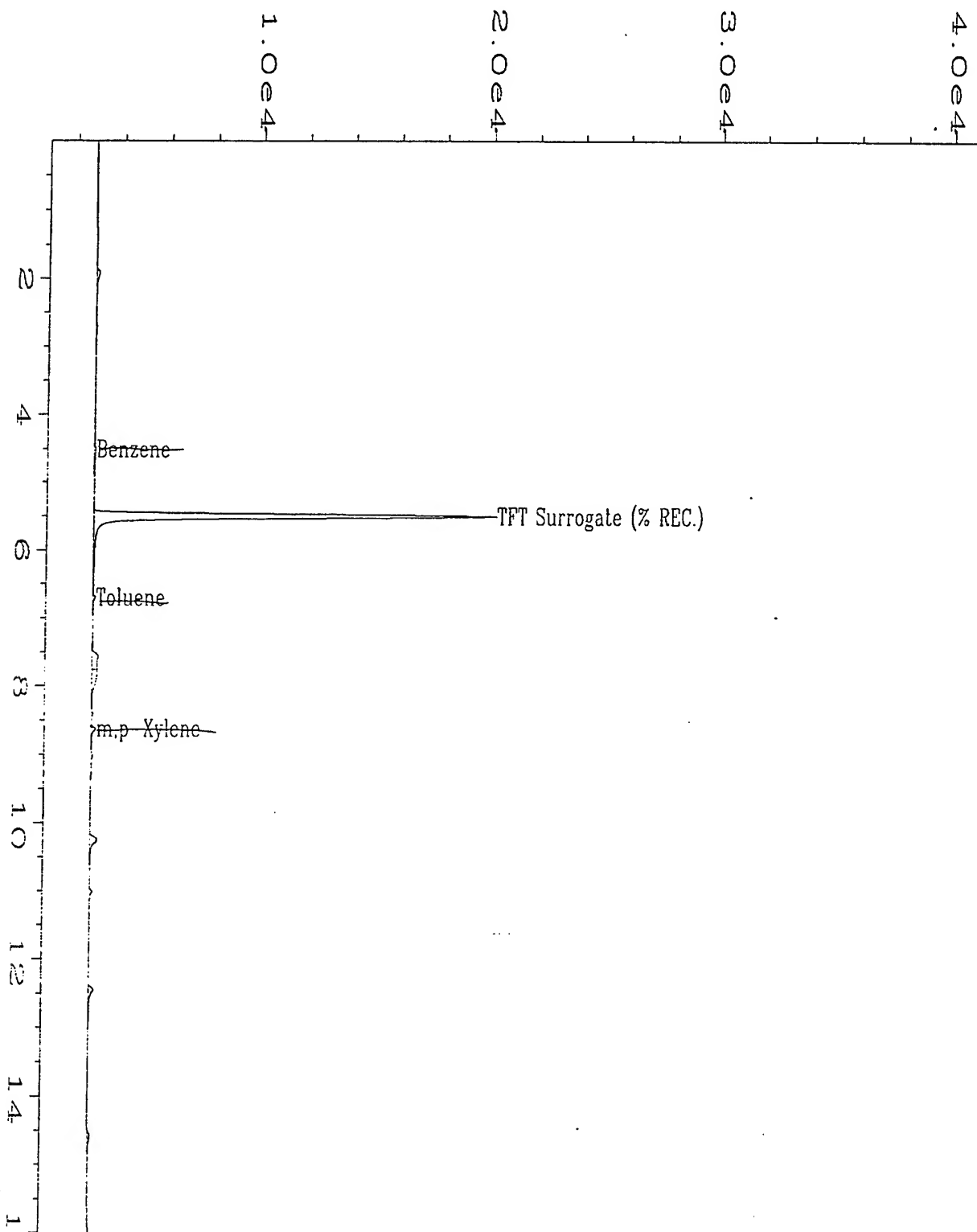
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*P. McClellan*

Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\015R1001.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 15          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : MEB042295;125                       | Sequence Line      | : 10          |
| Run Time Bar Code: |                                       | Instrument Method: | BX20422.MTH   |
| Acquired on        | : 22 Apr 95 06:54 PM                  | Analysis Method    | : BX20422.MTH |
| Report Created on: | 24 Apr 95 06:42 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 24 APR 95 06:19 PM                  | ISTD Amount        | :             |
| Multiplier         | : 125                                 |                    |               |
| Sample Info        | : 100 UL MEOH                         |                    |               |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Methanol Blank Report

Method Blank Number : MEB042395  
Date Extracted/Prepared : 4/23/95  
Date Analyzed : 4/23/95  
% Moisture : NA

Client Project No. : 722450.2602/SJ AFB  
Lab Project No. : 95-1182  
Dilution Factor : 125.00  
Method : 602/8020  
Matrix : Water/MeOH  
Lab File No. : BX2042311

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/kg | RL<br>ug/kg          |
|---|-----------------------------------|----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                | 500                  |
| Toluene   | 108-88-3                          | U                                | 500                  |
| Chlorobenzene   | 108-90-7                          | U                                | 500                  |
| Ethyl Benzene   | 100-41-4                          | U                                | 500                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 51                               | 500                  |
| 3,5-Trimethylbenzene  | 108-67-8                          | 54                               | 500                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                                | 500                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 110                              | 500                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                | 500                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 105%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

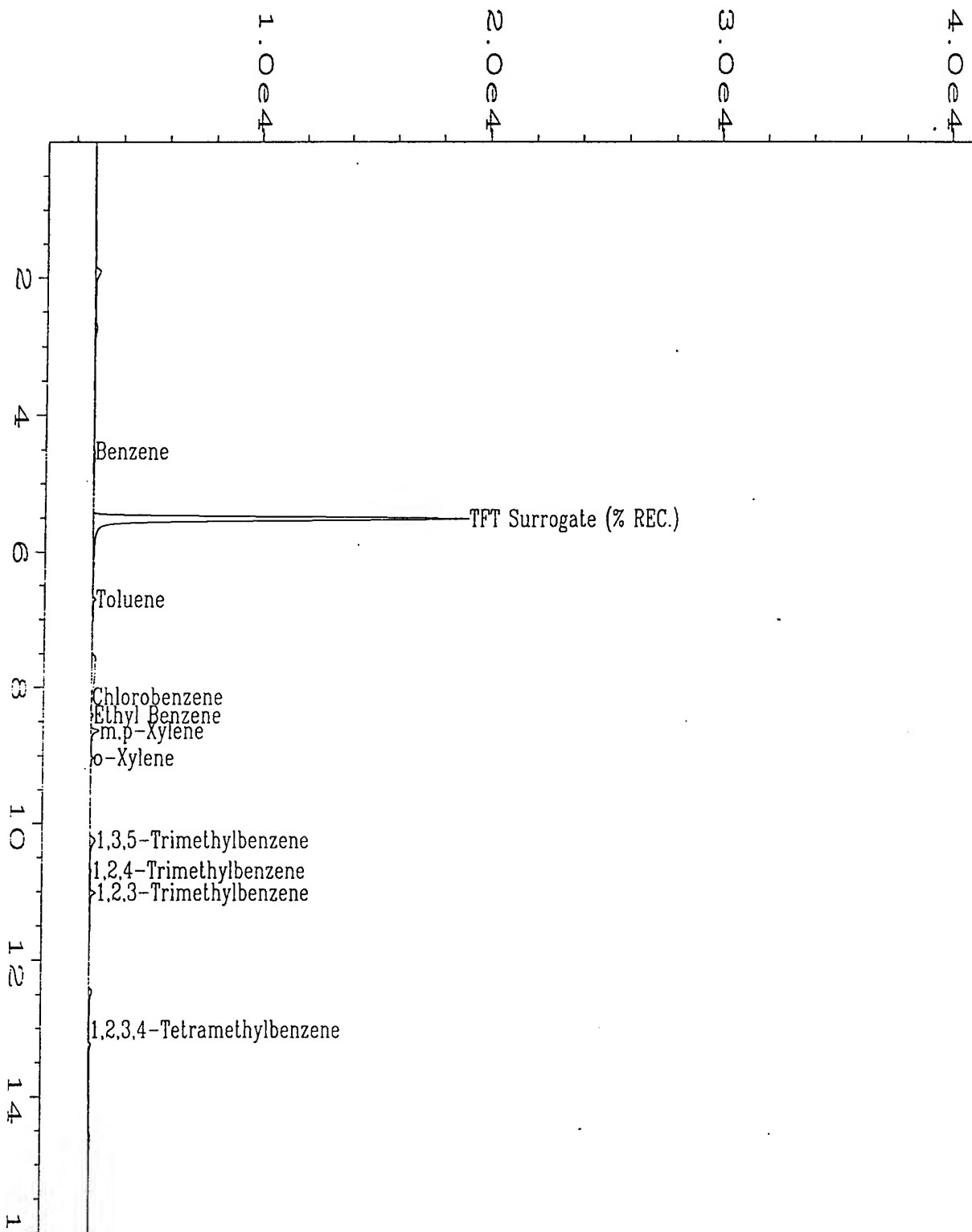
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

Analyst

*K. Cone*  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20423\011R0901.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 11          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : MEB042395                           | Sequence Line      | : 9           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20423.MTH   |
| Acquired on        | : 23 Apr 95 02:50 PM                  | Analysis Method    | : BX20423.MTH |
| Report Created on  | : 02 May 95 02:26 PM                  | Sample Amount      | : 0           |
| Last Recalib on    | : 25 APR 95 04:27 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Method Blank Report

Method Blank Number : MB042095  
Date Extracted/Prepared : 4/20/95  
Date Analyzed : 4/20/95  
% Moisture : NA

Client Project No. : 722450.2602/SJ AFB  
Lab Project No. : 95-1182  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX1042009

| Compound Name               | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L |
|-----------------------------|-----------------------------------|------------------------------|------------|
| Benzene                     | 71-43-2                           | U                            | 0.4        |
| Toluene                     | 108-88-3                          | U                            | 0.4        |
| Chlorobenzene               | 108-90-7                          | U                            | 0.4        |
| Ethyl Benzene               | 100-41-4                          | U                            | 0.4        |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4        |
| ,3,5-Trimethylbenzene       | 108-67-8                          | U                            | 0.4        |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | U                            | 0.4        |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | U                            | 0.4        |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | U                            | 0.4        |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 101% 70%-130% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.


U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

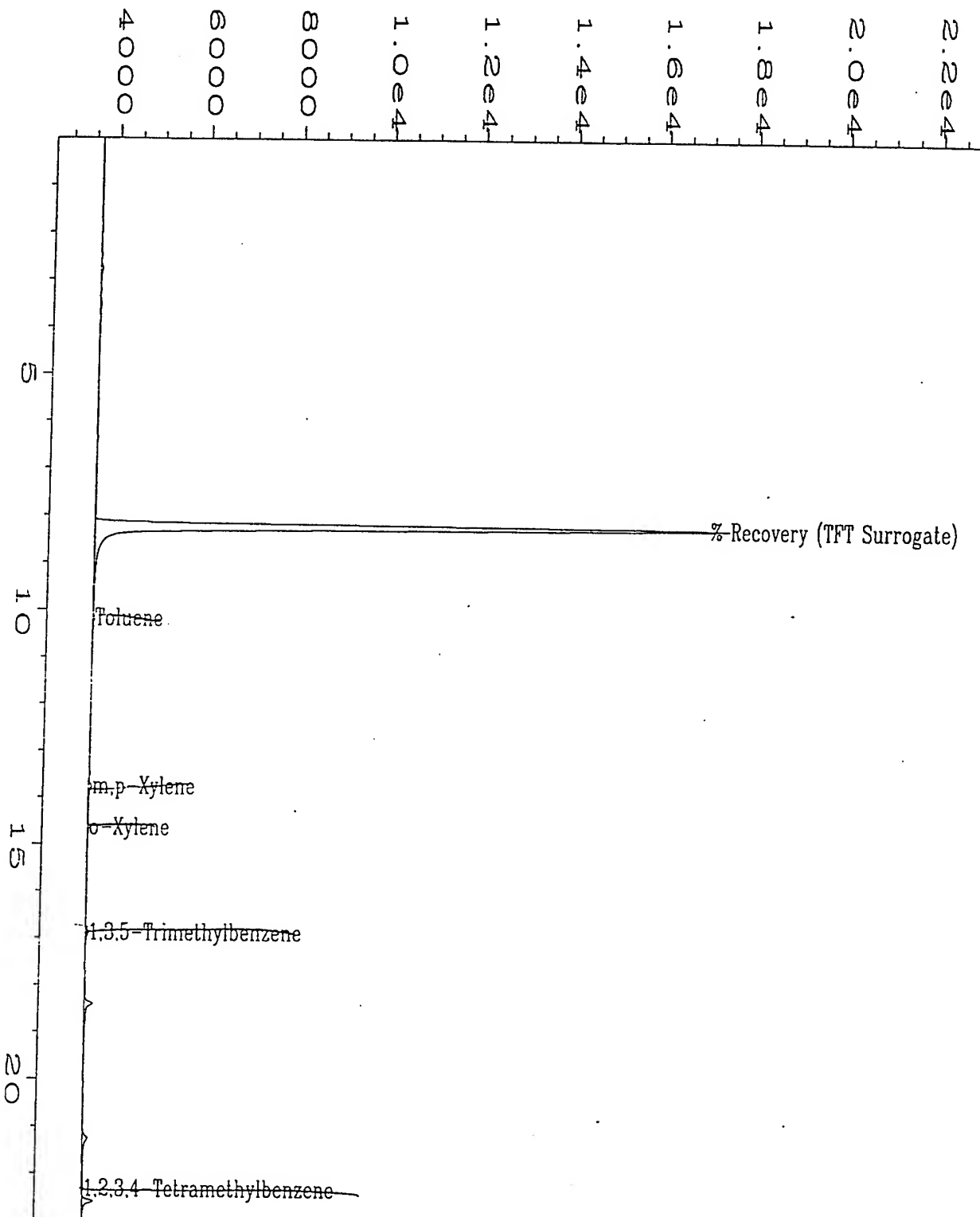
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

'A' = Not Available/Not Applicable.

  
Analyst

  
Approved



|                   |                                       |                    |                |
|-------------------|---------------------------------------|--------------------|----------------|
| ata File Name     | : C:\HPCHEM\1\DATA\BX10420\009F0701.D | Page Number        | : 1            |
| operator          | : SW Tyson                            | Vial Number        | : 9            |
| nstrument         | : BTEX1                               | Injection Number   | : 1            |
| ample Name        | : MB042095                            | Sequence Line      | : 7            |
| in Time Bar Code: |                                       | Instrument Method: | BX10420.MTH    |
| quired on         | : 20 Apr 95 02:35 PM                  | Analysis Method    | : BX10420B.MTH |
| Created on:       | 21 Apr 95 12:38 PM                    | Sample Amount      | : 0            |
| ecalib on         | : 21 APR 95 12:15 PM                  | ISTD Amount        | :              |
| ultiplier         | : 1                                   |                    |                |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Method Blank Report

Method Blank Number : MB042395  
Date Extracted/Prepared : 4/23/95  
Date Analyzed : 4/23/95  
% Moisture : NA

Client Project No. : 722450.2602/SJ AFE  
Lab Project No. : 95-1182  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042310

| Compound Name               | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L |
|-----------------------------|-----------------------------------|------------------------------|------------|
| Benzene                     | 71-43-2                           | U                            | 0.4        |
| Toluene                     | 108-88-3                          | U                            | 0.4        |
| Chlorobenzene               | 108-90-7                          | U                            | 0.4        |
| Ethyl Benzene               | 100-41-4                          | U                            | 0.4        |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | 0.4                          | 0.4        |
| ,3,5-Trimethylbenzene       | 108-67-8                          | 0.5                          | 0.4        |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | U                            | 0.4        |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | 0.8                          | 0.4        |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | U                            | 0.4        |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 96% 70%-130% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.


U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

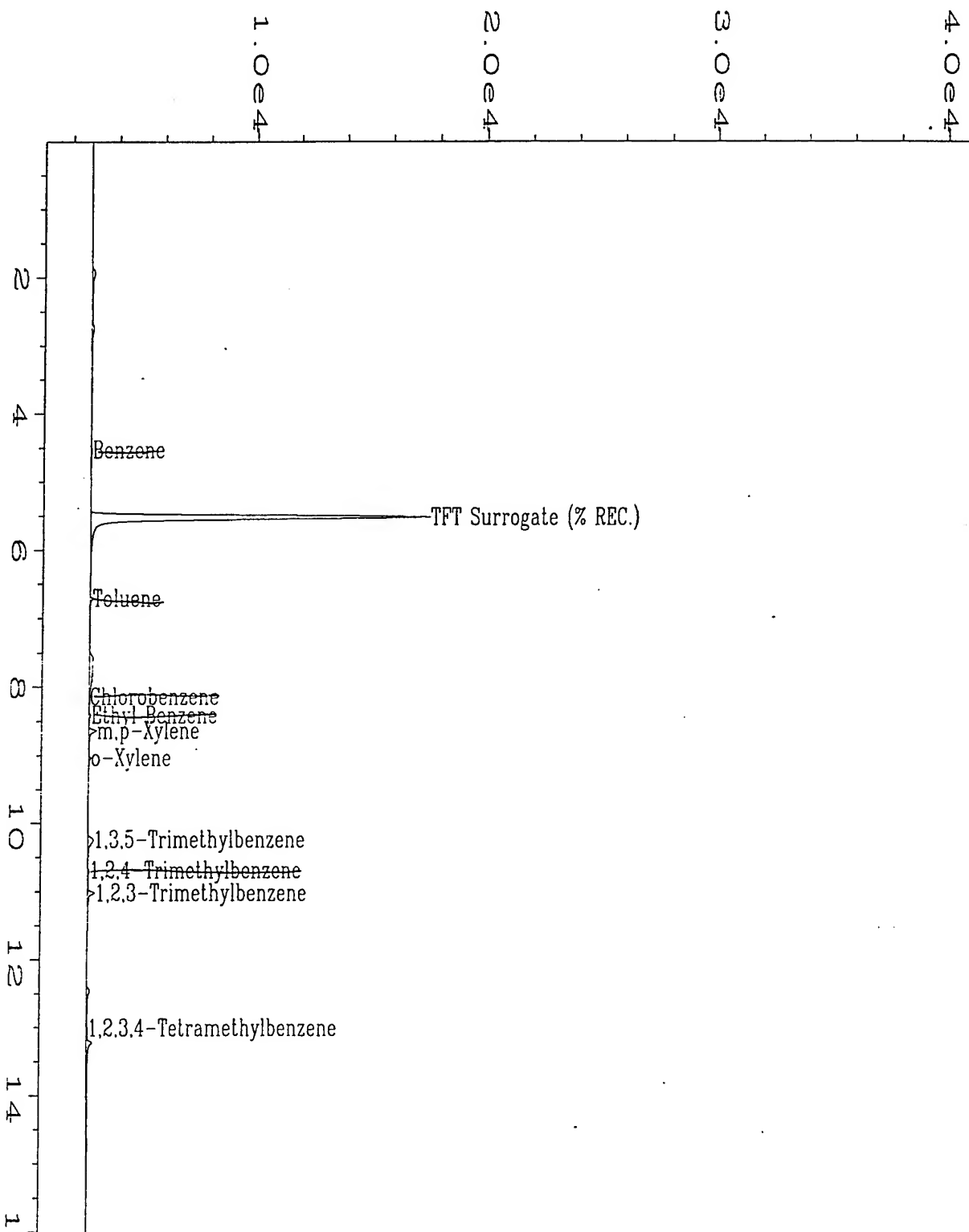
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

A = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20423\010R0901.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 10          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : MB042395                            | Sequence Line     | : 9           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20423.MTH |
| Acquired on        | : 23 Apr 95 02:14 PM                  | Analysis Method   | : BX20423.MTH |
| Report Created on  | : 02 May 95 02:25 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 25 APR 95 04:27 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Method Blank Report

Method Blank Number : MB042295  
Date Extracted/Prepared : 4/22/95  
Date Analyzed : 4/22/95  
% Moisture : NA

Client Project No. : 722450.2602/SJ AFE  
Lab Project No. : 95-1182  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042211

| Compound Name               | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L |
|-----------------------------|-----------------------------------|---------------------------------|------------|
| Benzene                     | 71-43-2                           | U                               | 0.4        |
| Toluene                     | 108-88-3                          | U                               | 0.4        |
| Chlorobenzene               | 108-90-7                          | U                               | 0.4        |
| Ethyl Benzene               | 100-41-4                          | U                               | 0.4        |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4        |
| ,3,5-Trimethylbenzene       | 108-67-8                          | U                               | 0.4        |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | U                               | 0.4        |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | U                               | 0.4        |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | 0.4                             | 0.4        |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 101% 70%-130% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

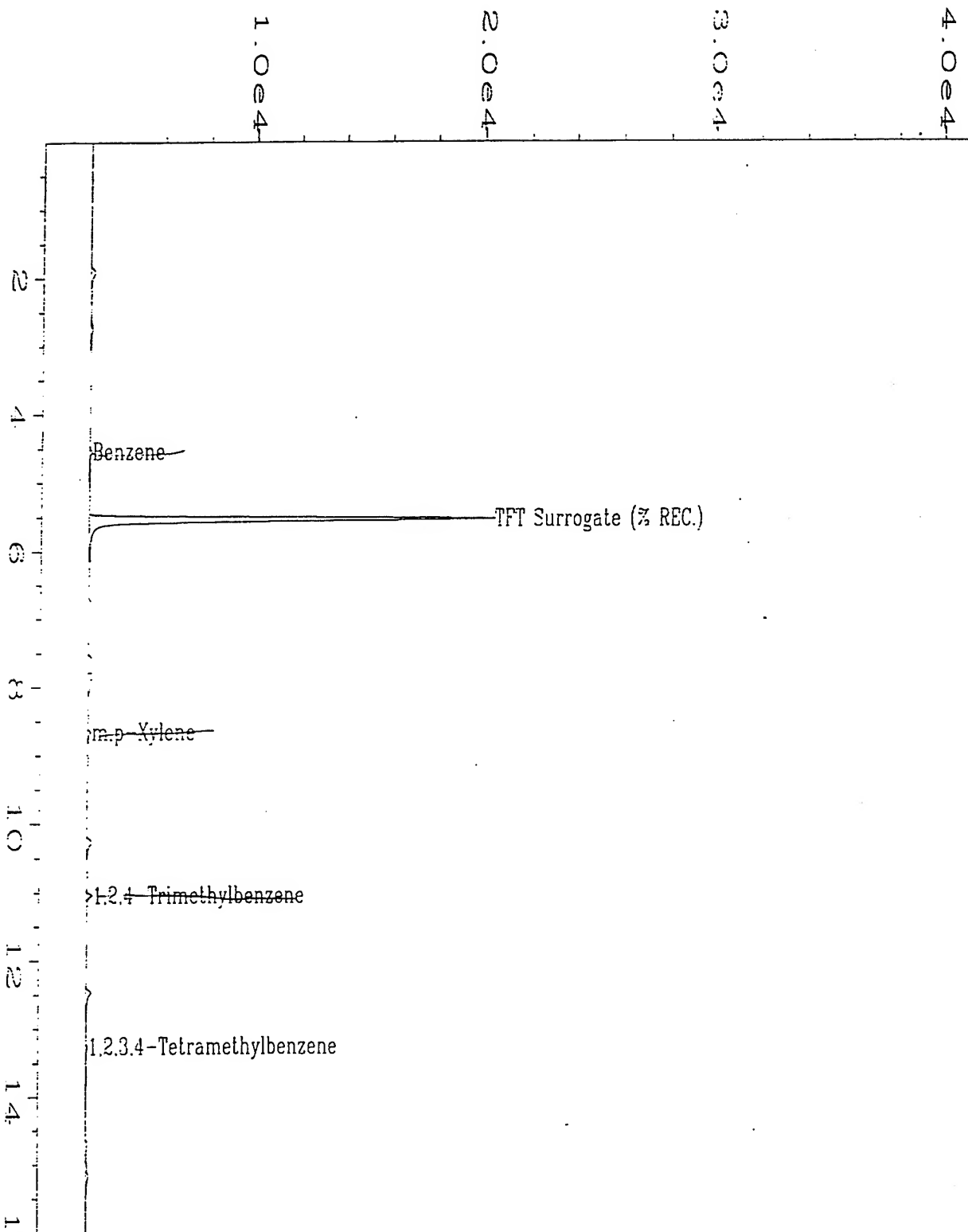
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\011R1001.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 11          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : MB042295                            | Sequence Line      | : 10          |
| Run Time Bar Code: |                                       | Instrument Method: | BX20422.MTH   |
| Printed on         | : 22 Apr 95 03:54 PM                  | Analysis Method    | : BX20422.MTH |
| Print Created on:  | 24 Apr 95 06:40 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 24 APR 95 06:19 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

Client Sample Number : MW-1 12-14  
Lab Sample Number : X05620  
Date Sampled : 4/10/95  
Date Received : 4/12/95  
Date Extracted/Prepared : 4/20/95  
Date Analyzed : 4/20/95  
% Moisture : 20.44%

Client Project No. : 722450.2602/SJ AFE  
Lab Project No. : 95-1182  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX1042022  
Method Blank No. : MB042095

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 5.0                  |
| Toluene   | 108-88-3                          | 1.0 J                             | 5.0                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.0                  |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.0                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 0.8 J                             | 5.0                  |
| ,3,5-Trimethylbenzene   | 108-67-8                          | U                                 | 5.0                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                                 | 5.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                                 | 5.0                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.0                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 92%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

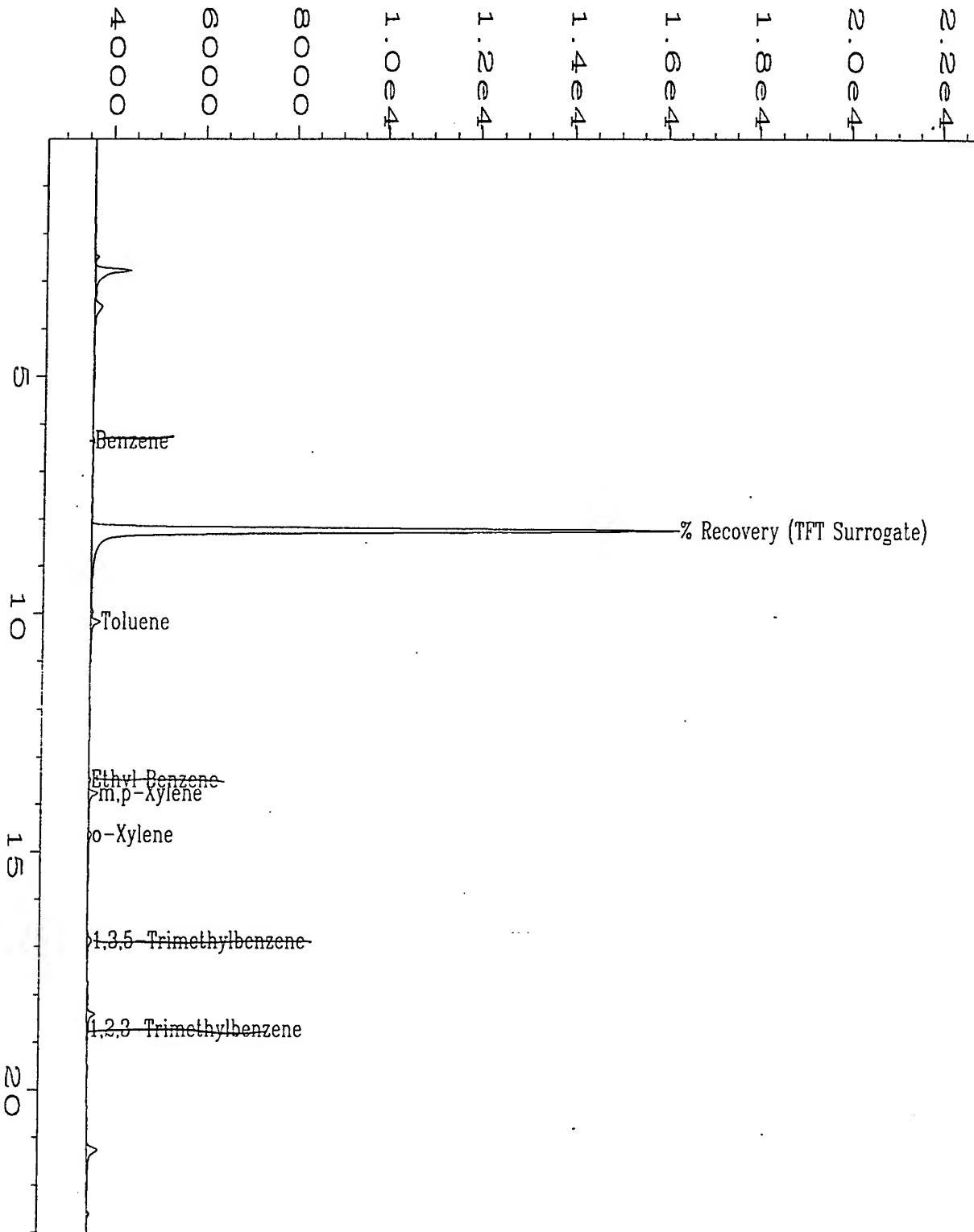
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

'A = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\022F0701.D        | Page Number       | : 1            |
| Operator           | : SW Tyson                                   | Vial Number       | : 22           |
| Instrument         | : BTEX1                                      | Injection Number  | : 1            |
| Sample Name        | : X05620;1;5                                 | Sequence Line     | : 7            |
| Run Time Bar Code: |  | Instrument Method | : BX10420.MTH  |
| Acquired on        | : 20 Apr 95 11:18 PM                         | Analysis Method   | : BX10420B.MTH |
| Report Created on: | 21 Apr 95 12:44 PM                           | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 12:15 PM                         | ISTD Amount       | :              |
| Multiplier         | : 1  |                   |                |
| Sample Info        | : PROJECT#: 95-1182 CLIENT#: MW-1 12-14 SOIL |                   |                |

*Done 5/12/95*

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

|                         |                 |                    |                      |
|-------------------------|-----------------|--------------------|----------------------|
| Client Sample Number    | : MW-2 9.5-10.5 | Client Project No. | : 722450.2602/SJ AFB |
| Lab Sample Number       | : X05621        | Lab Project No.    | : 95-1182            |
| Date Sampled            | : 4/11/95       | Dilution Factor    | : 5000.00            |
| Date Received           | : 4/12/95       | Method             | : 8020               |
| Date Extracted/Prepared | : 4/22/95       | Matrix             | : Soil               |
| Date Analyzed           | : 4/22/95       | Lab File No.       | : BX2042218          |
| % Moisture              | : 19.92%        | Method Blank No.   | : MEB042295          |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 25000                |
| Toluene   | 108-88-3                          | 3800 J                            | 25000                |
| Chlorobenzene   | 108-90-7                          | 9300 J                            | 25000                |
| Ethyl Benzene   | 100-41-4                          | 4300 J                            | 25000                |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 12000 J                           | 25000                |
| 3,5-Trimethylbenzene  | 108-67-8                          | 35000                             | 25000                |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 90000                             | 25000                |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 33000                             | 25000                |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 42000                             | 25000                |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 101%                              | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

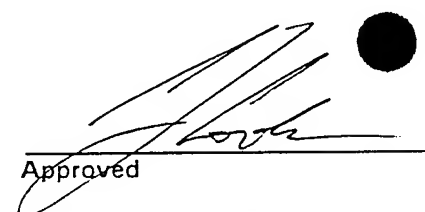
B = Compound also found in the blank.

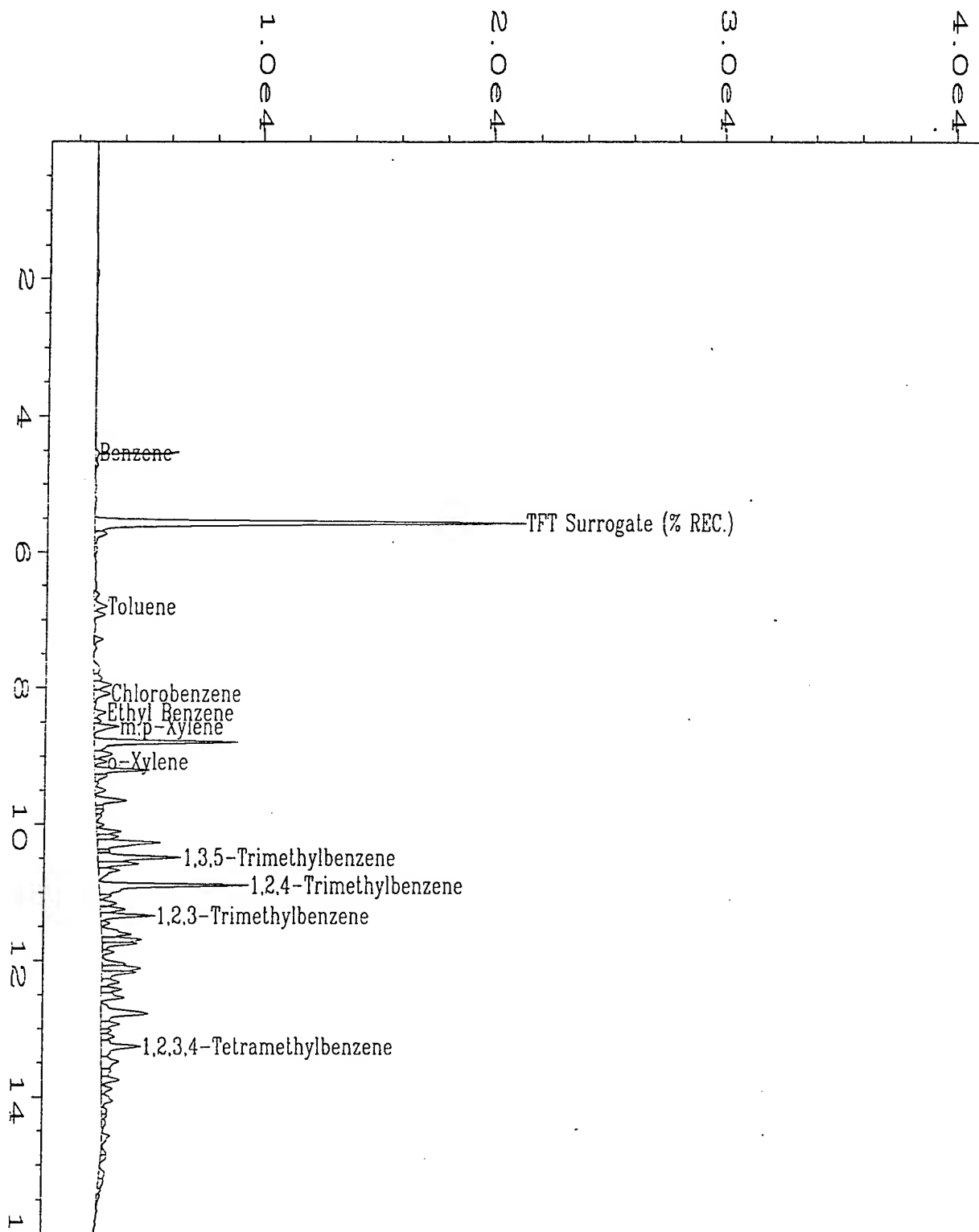
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
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Data File Name : C:\HPCHEM\2\DATA\BX20422\018R1001.D  
 Operator : T.Lockwood  
 Instrument : BTEX2  
 Sample Name : X05621;5000;4  
 Run Time Bar Code:  
 Acquired on : 22 Apr 95 08:42 PM  
 Report Created on: 24 Apr 95 06:44 PM  
 Last Recalib on : 24 APR 95 06:19 PM  
 Multiplier : 5000  
 Sample Info : 95-1182; ,MW-2 9 1/2-10 1/2;2.5 UL SOIL EXTRACT OF 4GRAMS/10  
 ML  
 MEOH

Page Number : 1  
 Vial Number : 18  
 Injection Number : 1  
 Sequence Line : 10  
 Instrument Method: BX20422.MTH  
 Analysis Method : BX20422.MTH  
 Sample Amount : 0  
 ISTD Amount :

*Jim 5/12/95*

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

|                         |                |                    |                      |
|-------------------------|----------------|--------------------|----------------------|
| Client Sample Number    | : MW-2 10.5-12 | Client Project No. | : 722450.2602/SJ AFE |
| Lab Sample Number       | : X05622       | Lab Project No.    | : 95-1182            |
| Date Sampled            | : 4/11/95      | Dilution Factor    | : 10000.00           |
| Date Received           | : 4/12/95      | Method             | : 8020               |
| Date Extracted/Prepared | : 4/23/95      | Matrix             | : Soil               |
| Date Analyzed           | : 4/23/95      | Lab File No.       | : BX2042313          |
| % Moisture              | : 20.84%       | Method Blank No.   | : MEB042395          |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | 13000 J                           | 51000                |
| Toluene   | 108-88-3                          | 130000                            | 51000                |
| Chlorobenzene   | 108-90-7                          | 15000 J                           | 51000                |
| Ethyl Benzene   | 100-41-4                          | 130000                            | 51000                |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 680000 B                          | 51000                |
| ,3,5-Trimethylbenzene   | 108-67-8                          | 190000 B                          | 51000                |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 540000                            | 51000                |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 130000 B                          | 51000                |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 230000                            | 51000                |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 102%                              | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

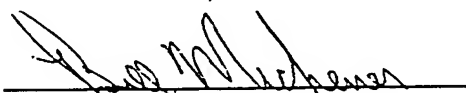
U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

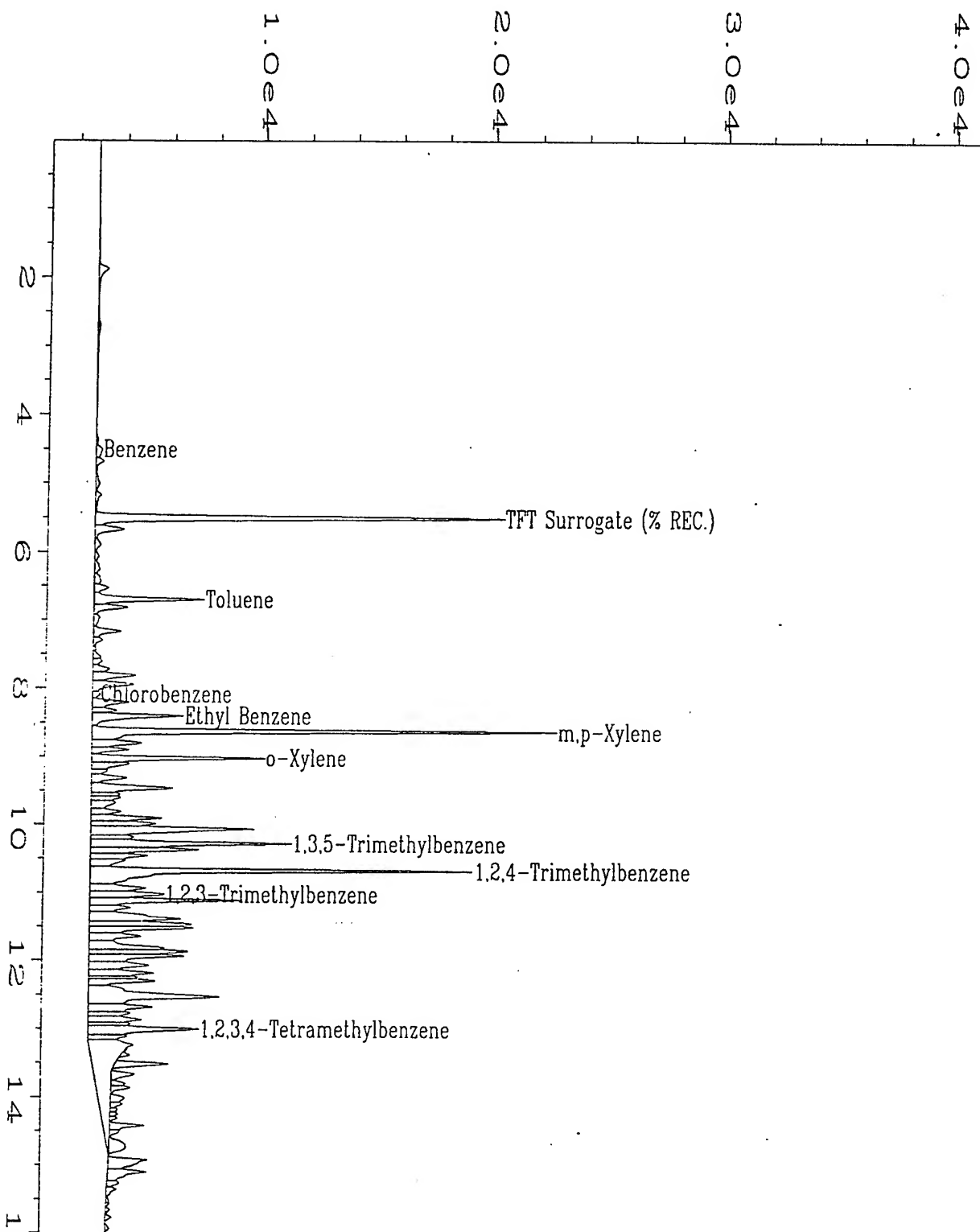
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

A = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |  |                    |               |
|--------------------|--|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20423\013R0901.D                              | Page Number        | : 1           |
| Operator           | : T.Lockwood   | Vial Number        | : 13          |
| Instrument         | : BTEX2  | Injection Number   | : 1           |
| Sample Name        | : X05622;10000;1   | Sequence Line      | : 9           |
| Run Time Bar Code: |  | Instrument Method: | BX20423.MTH   |
| Acquired on        | : 23 Apr 95 04:01 PM   | Analysis Method    | : BX20423.MTH |
| Report Created on: | 25 Apr 95 04:49 PM   | Sample Amount      | : 0           |
| Last Recalib on    | : 25 APR 95 04:27 PM   | ISTD Amount        | :             |
| Multiplier         | : 1e+004   |                    |               |
| Sample Info        | : 95-1182; MW-2 10 1/2-12';10 UL SOIL EXTRACT OF 1GRAMS/10 ML MECH |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

Client Sample Number : MW-4 13.5-15  
Lab Sample Number : X05623  
Date Sampled : 4/11/95  
Date Received : 4/12/95  
Date Extracted/Prepared : 4/20/95  
Date Analyzed : 4/21/95  
% Moisture : 12.71%

Client Project No. : 722450.2602/SJ AF  
Lab Project No. : 95-1182  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX1042024  
Method Blank No. : MB042095

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg        |
|---|-----------------------------------|-----------------------------------|---------------------|
| Benzene   | 71-43-2                           | U                                 | 4.6                 |
| Toluene   | 108-88-3                          | 1.1 J                             | 4.6                 |
| Chlorobenzene   | 108-90-7                          | 1.9 J                             | 4.6                 |
| Ethyl Benzene   | 100-41-4                          | 1.4 J                             | 4.6                 |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 11                                | 4.6                 |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 5.6                               | 4.6                 |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 16                                | 4.6                 |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 7.3                               | 4.6                 |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 11                                | 4.6                 |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 76%                               | 50%-150% (QC limit) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.


U = Compound analyzed for, but not detected.

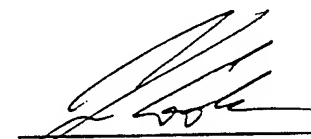
B = Compound also found in the blank.

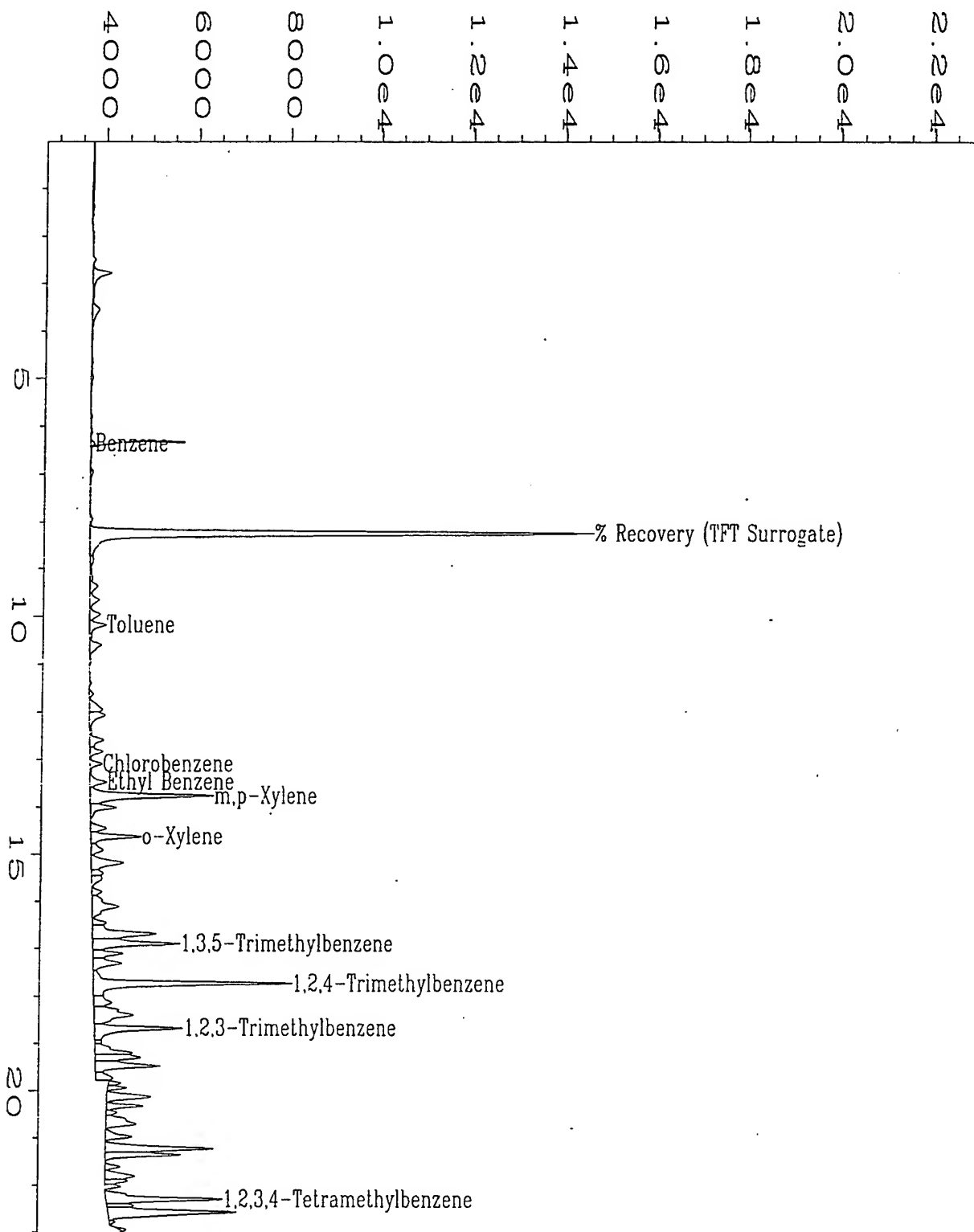
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

IA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |                     |
|--------------------|---------------------------------------|--------------------|---------------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\024F0701.D | Page Number        | : 1                 |
| Operator           | : SW Tyson                            | Vial Number        | : 24                |
| Instrument         | : BTEX1                               | Injection Number   | : 1                 |
| Sample Name        | : X05623;1;5                          | Sequence Line      | : 7                 |
| Run Time Bar Code: |                                       | Instrument Method: | BX10420.MTH         |
| Acquired on        | : 21 Apr 95 00:37 AM                  | Analysis Method    | : BX10420B.MTH      |
| Report Created on: | 21 Apr 95 12:45 PM                    | Sample Amount      | : 0                 |
| Last Recalib on    | : 21 APR 95 12:15 PM                  | ISTD Amount        | :                   |
| Multiplier         | : 1                                   |                    |                     |
| Sample Info        | : PROJECT#: 95-1182                   | CLIENT#:           | MW-4 13 1/2-15 SOIL |

SW 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

|                         |                 |                    |                      |
|-------------------------|-----------------|--------------------|----------------------|
| Client Sample Number    | : MW-4 12--13.5 | Client Project No. | : 722450.2602/SJ AFE |
| Lab Sample Number       | : X05624        | Lab Project No.    | : 95-1182            |
| Date Sampled            | : 4/11/95       | Dilution Factor    | : 5000.00            |
| Date Received           | : 4/12/95       | Method             | : 8020               |
| Date Extracted/Prepared | : 4/22/95       | Matrix             | : Soil               |
| Date Analyzed           | : 4/22/95       | Lab File No.       | : BX2042217          |
| % Moisture              | : 21.33%        | Method Blank No.   | : MEB042295          |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                                | 25000                |
| Toluene   | 108-88-3                          | 23000                             | 25000                |
| Chlorobenzene   | 108-90-7                          | **                                | 25000                |
| Ethyl Benzene   | 100-41-4                          | 4100 J                            | 25000                |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 200000                            | 25000                |
| ,3,5-Trimethylbenzene   | 108-67-8                          | 31000                             | 25000                |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 220000                            | 25000                |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 17000 J                           | 25000                |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 11000 J                           | 25000                |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 100%                              | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

\*\* = See BX1042028 (DF = 125).

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

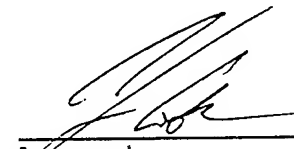
B = Compound also found in the blank.

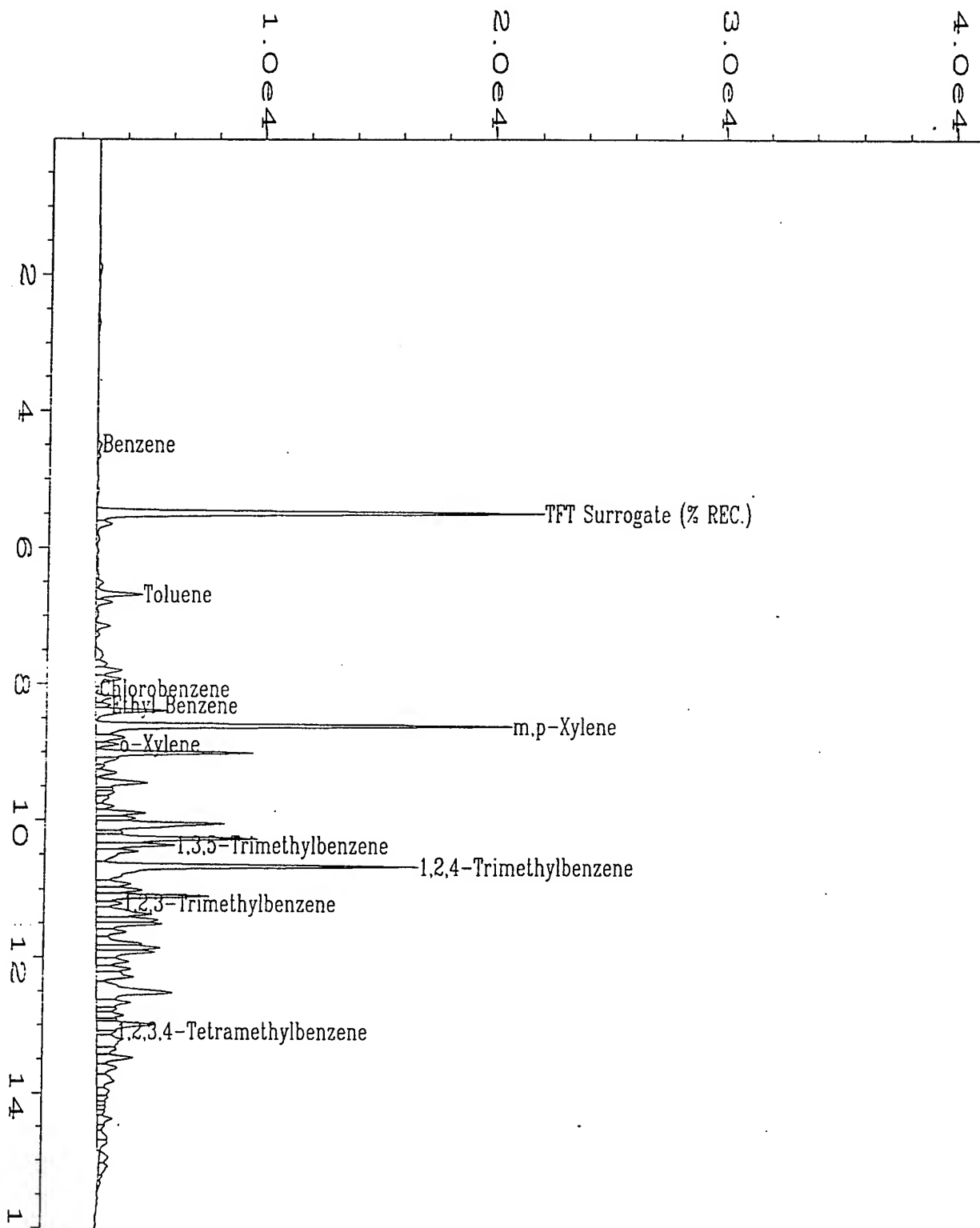
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

\ = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |  |                    |               |
|--------------------|--|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\017R1001.D                              | Page Number        | : 1           |
| Operator           | : T.Lockwood   | Vial Number        | : 17          |
| Instrument         | : BTEX2  | Injection Number   | : 1           |
| Sample Name        | : X05624;5000;4  | Sequence Line      | : 10          |
| Run Time Bar Code: |  | Instrument Method: | BX20422.MTH   |
| Acquired on        | : 22 Apr 95 08:06 PM   | Analysis Method    | : BX20422.MTH |
| Report Created on: | 25 Apr 95 01:52 PM   | Sample Amount      | : 0           |
| Last Recalib on    | : 24 APR 95 06:19 PM   | ISTD Amount        | :             |
| Multiplier         | : 5000   |                    |               |
| Sample Info        | : 95-1182; MW-4 12-13 1/2;2.5 UL SOIL EXTRACT OF 4GRAMS/10 ML MEOH |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

|                         |                |                    |                      |
|-------------------------|----------------|--------------------|----------------------|
| Client Sample Number    | : MW-4 12-13.5 | Client Project No. | : 722450.2602/SJ AFE |
| Lab Sample Number       | : X05624       | Lab Project No.    | : 95-1182            |
| Date Sampled            | : 4/11/95      | Dilution Factor    | : 125.00             |
| Date Received           | : 4/12/95      | Method             | : 8020               |
| Date Extracted/Prepared | : 4/20/95      | Matrix             | : Soil               |
| Date Analyzed           | : 4/21/95      | Lab File No.       | : BX1042028          |
| % Moisture              | : 21.33%       | Method Blank No.   | : MB042095           |

| Compound Name               | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg |
|-----------------------------|-----------------------------------|-----------------------------------|--------------|
| Benzene                     | 71-43-2                           | 740                               | 640          |
| Toluene                     | 108-88-3                          | **                                | 640          |
| Chlorobenzene               | 108-90-7                          | 2800                              | 640          |
| Ethyl Benzene               | 100-41-4                          | **                                | 640          |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | **                                | 640          |
| ,3,5-Trimethylbenzene       | 108-67-8                          | **                                | 640          |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | **                                | 640          |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | **                                | 640          |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | **                                | 640          |

|   |      |                      |
|---|------|----------------------|
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): | 114% | 50%-150% (QC limits) |
|---|------|----------------------|

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

\*\* = See BX2042217 (DF = 5000).

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

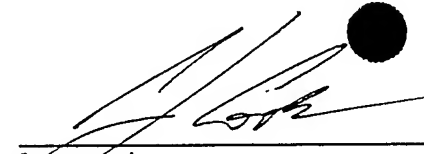
B = Compound also found in the blank.

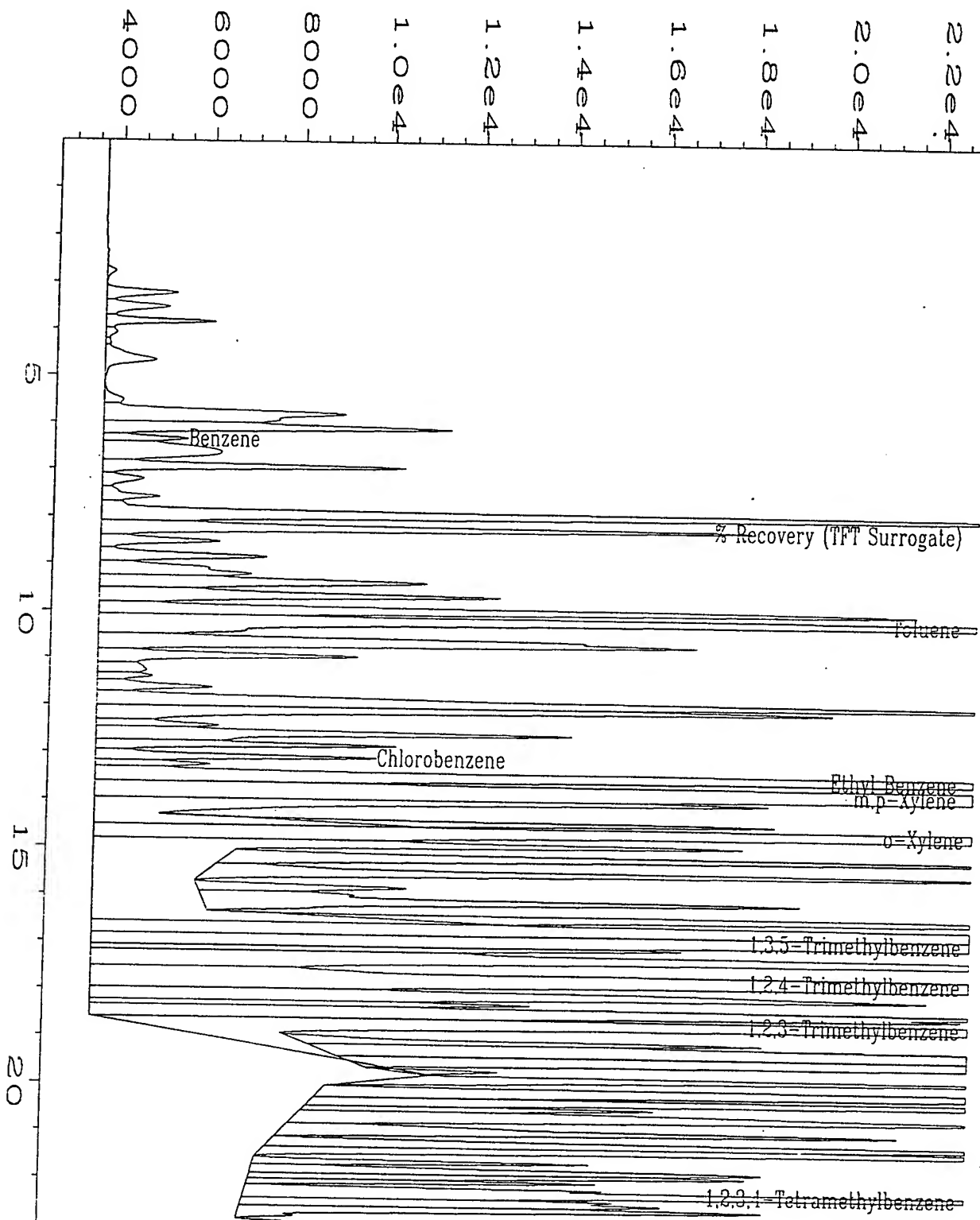
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\028F0701.D                 | Page Number       | : 1            |
| Operator           | : SW Tyson  | Vial Number       | : 28           |
| Instrument         | : BTEX1   | Injection Number  | : 1            |
| Sample Name        | : X05624;125;4  | Sequence Line     | : 7            |
| Run Time Bar Code: |   | Instrument Method | : BX10420.MTH  |
| Acquired on        | : 21 Apr 95 03:15 AM                                  | Analysis Method   | : BX10420B.MTH |
| Report Created on: | : 21 Apr 95 12:51 PM                                  | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 12:15 PM                                  | ISTD Amount       | :              |
| Multiplier         | : 125   |                   |                |
| Sample Info        | : PROJECT#: 95-1182 CLIENT#: MW-4 12-13 1/2 SOIL/EXT. |                   |                |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-80201

Method 8020 Data Report

Client Sample Number : MW-5 13-14.5  
Lab Sample Number : X05625  
Date Sampled : 4/11/95  
Date Received : 4/12/95  
Date Extracted/Prepared : 4/20/95  
Date Analyzed : 4/21/95  
% Moisture : 22.72%

Client Project No. : 722450.2602/SJ AFE  
Lab Project No. : 95-1182  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX1042025  
Method Blank No. : MB042095

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 5.2                  |
| Toluene   | 108-88-3                          | 0.7 J                             | 5.2                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.2                  |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.2                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 2.3 J                             | 5.2                  |
| ,3,5-Trimethylbenzene   | 108-67-8                          | 0.6 J                             | 5.2                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 0.8 J                             | 5.2                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 0.6 J                             | 5.2                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.2                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 68%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.


U = Compound analyzed for, but not detected.

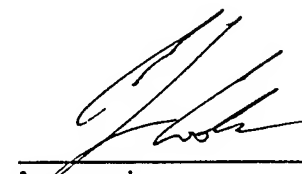
B = Compound also found in the blank.

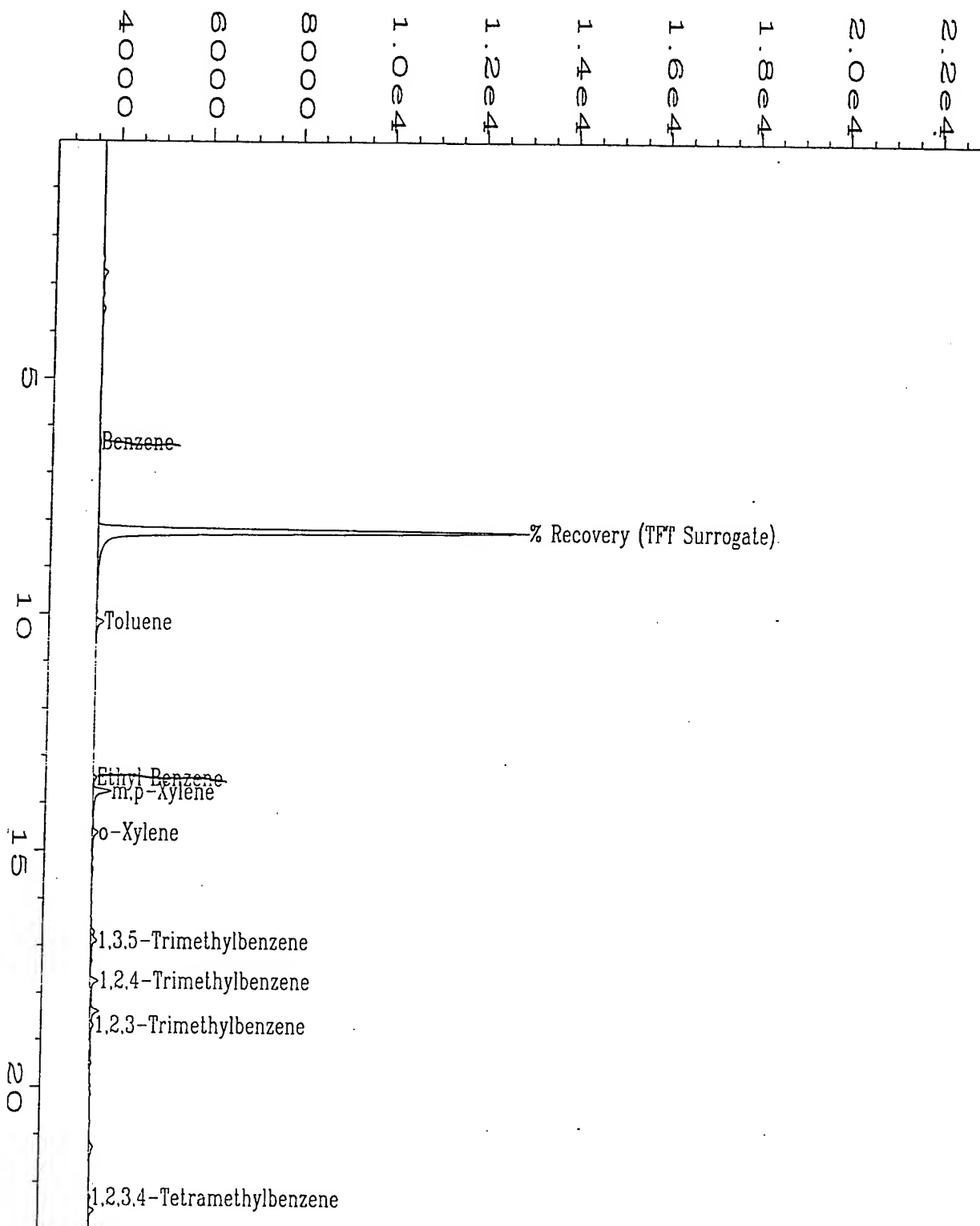
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |  |                    |                |
|--------------------|--|--------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\025F0701.D        | Page Number        | : 1            |
| Operator           | : SW Tyson                                   | Vial Number        | : 25           |
| Instrument         | : BTEX1                                      | Injection Number   | : 1            |
| Sample Name        | : X05625;1;5                                 | Sequence Line      | : 7            |
| Run Time Bar Code: |  | Instrument Method: | BX10420.MTH    |
| Acquired on        | : 21 Apr 95 01:16 AM                         | Analysis Method    | : BX10420B.MTH |
| Report Created on: | 21 Apr 95 12:46 PM                           | Sample Amount      | : 0            |
| Last Recalib on    | : 21 APR 95 12:15 PM                         | ISTD Amount        | :              |
| Multiplier         | : 1  |                    |                |
| Sample Info        | : PROJECT#: 95-1182 CLIENT#: MW-5 13-14 SOIL |                    |                |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |              |
|-------------------------|-------------|-----------------|--------------|
| LCS Number              | : LCS042095 | Dilution Factor | : 1.00       |
| Date Extracted/Prepared | : 4/20/95   | Method          | : 602        |
| Date Analyzed           | : 4/20/95   | Matrix          | : Water      |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX10420008 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 16.7                   | 83.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 16.4                   | 82.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 17.1                   | 85.5                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 18.8                   | 94.0                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 18.5                   | 92.5                 | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 16.2                   | 81.0                 | 64.0-111.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 18.1                   | 90.5                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 20.1                   | 100.5                | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 18.1                   | 90.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 102%                   | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

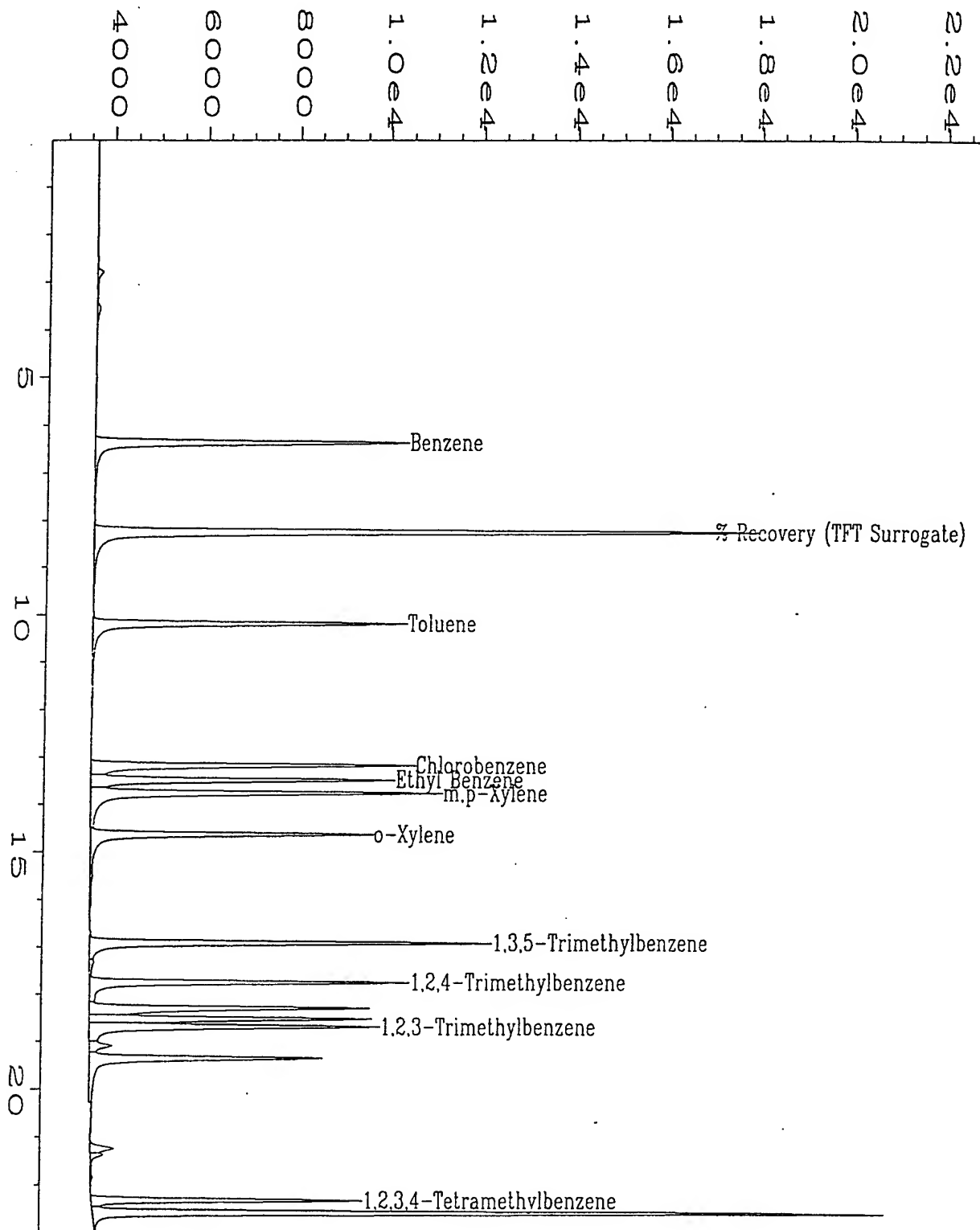
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

  
Analyst

  
Approved



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\008F0701.D | Page Number       | : 1            |
| Operator           | : SW Tyson                            | Vial Number       | : 8            |
| Instrument         | : BTEX1                               | Injection Number  | : 1            |
| Sample Name        | : LCS042095                           | Sequence Line     | : 7            |
| Run Time Bar Code: |                                       | Instrument Method | : BX10420.MTH  |
| Acquired on        | : 20 Apr 95 01:56 PM                  | Analysis Method   | : BX10420B.MTH |
| Report Created on: | : 21 Apr 95 12:38 PM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 12:15 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |             |
|-------------------------|-------------|-----------------|-------------|
| LCS Number              | : LCS042295 | Dilution Factor | : 1.00      |
| Date Extracted/Prepared | : 4/22/95   | Method          | : 602       |
| Date Analyzed           | : 4/22/95   | Matrix          | : Water     |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX2042210 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 19.0                   | 95.0                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 19.4                   | 97.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 20.3                   | 102                  | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 19.9                   | 99.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 18.7                   | 93.5                 | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 19.7                   | 98.5                 | 64.0-112.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 20.9                   | 105                  | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 19.4                   | 97.0                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 21.3                   | 107                  | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 18.5                   | 92.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 98%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

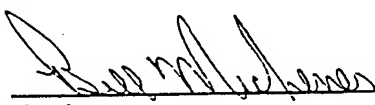
E = Extrapolated value

U = Compound analyzed for, but not detected.

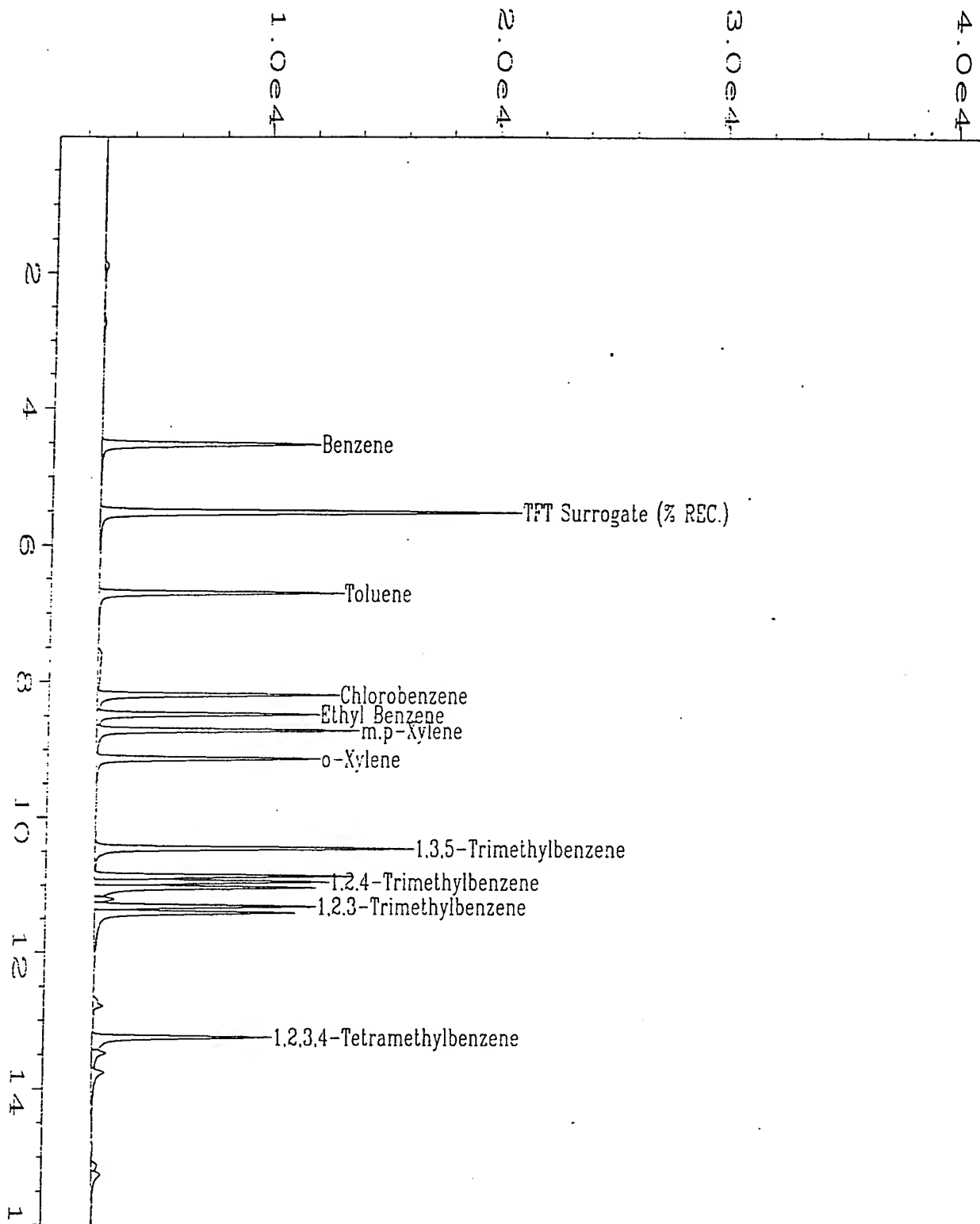
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\010R1001.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 10          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : LCS042295                           | Sequence Line     | : 10          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20422.MTH |
| Acquired on        | : 22 Apr 95 03:15 PM                  | Analysis Method   | : BX20422.MTH |
| Report Created on: | : 24 Apr 95 06:36 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 24 APR 95 06:19 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |              |
|-------------------------|-------------|-----------------|--------------|
| LCS Number              | : LCS042395 | Dilution Factor | : 1.00       |
| Date Extracted/Prepared | : 4/23/95   | Method          | : 602        |
| Date Analyzed           | : 4/23/95   | Matrix          | : Water      |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX20423009 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 18.0                   | 90.0                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 18.2                   | 91.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 18.6                   | 93.0                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 18.8                   | 94.0                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 20.0                   | 100                  | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 18.4                   | 92.0                 | 64.0-119.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 18.1                   | 90.5                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 19.1                   | 95.5                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 20.8                   | 104                  | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 103%                   | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

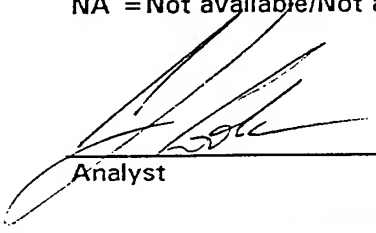
E = Extrapolated value

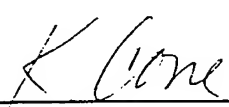
U = Compound analyzed for, but not detected.

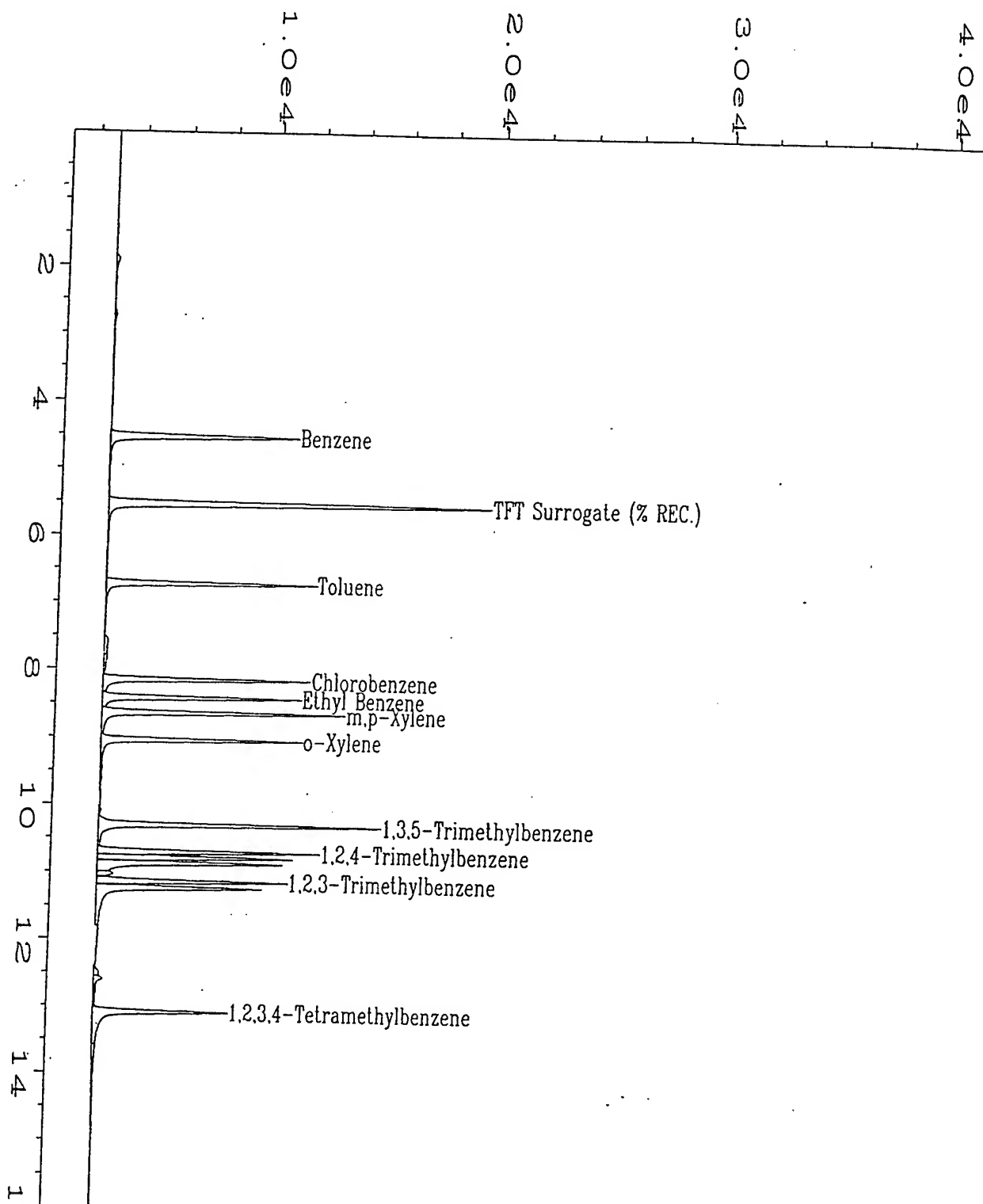
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

  
Analyst

  
Approved



Data File Name : D:\2\DATA\BX20423\009R0901.D  
 Operator : T.Lockwood  
 Instrument : BTEX2  
 Sample Name : LCS042395  
 Run Time Bar Code:  
 Acquired on : 23 Apr 95 01:38 PM  
 Created on: 25 Apr 95 04:31 PM  
 Last Recalib on : 25 Apr 95 04:27 PM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 9  
 Injection Number : 1  
 Sequence Line : 9  
 Instrument Method: BX20423.MTH  
 Analysis Method : BX20423.MTH  
 Sample Amount : 0  
 ISTD Amount :

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH-GASOLINE)

|               |              |                       |                          |
|---------------|--------------|-----------------------|--------------------------|
| Date Sampled  | : 4/10,11/95 | Client Project Number | : 722450.2602/SEYMORE    |
| Date Received | : 4/12/95    | Lab Project Number    | : 95-1182                |
| Date Prepared | : 4/21,24/95 | Matrix                | : Soil                   |
| Date Analyzed | : 4/21,24/95 | Method Number         | : EPA 5030/8015 Modified |

| Evergreen<br>Sample # | Client<br>Sample # | Surrogate<br>Recovery | TVH*<br>mg/Kg | RL*<br>mg/Kg |
|-----------------------|--------------------|-----------------------|---------------|--------------|
| MB042195              | METHOD BLANK       | 100%                  | U             | 0.1          |
| MB042495              | METHOD BLANK       | 100%                  | U             | 0.1          |
| X05620                | MW-1 12-14         | 119%                  | U             | 0.13         |
| X05621                | MW-2 9 1/2-10 1/2  | 99%                   | 660           | 6.2          |
| X05621 DUP            | MW-2 9 1/2-10 1/2  | 118%                  | 570           | 6.2          |
| X05622                | MW-2 10 1/2-12     | **                    | 3800 E        | 6.3          |
| X05623                | MW-4 13 1/2-15     | 105%                  | U             | 0.11         |
| X05624                | MW-4 12-13 1/2     | 114%                  | 3200 E        | 6.4          |
| X05625                | MW-5 13-14 1/2     | 110%                  | U             | 0.13         |

\* = Based on a dry weight basis.

\*\* = Unable to separate surrogate from analyte.


QUALIFIERS

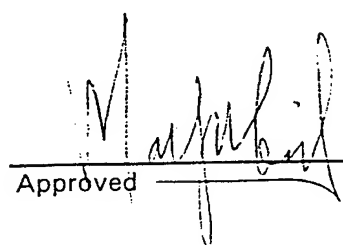
U = TVH analyzed for but not detected.

B = TVH found in blank also.

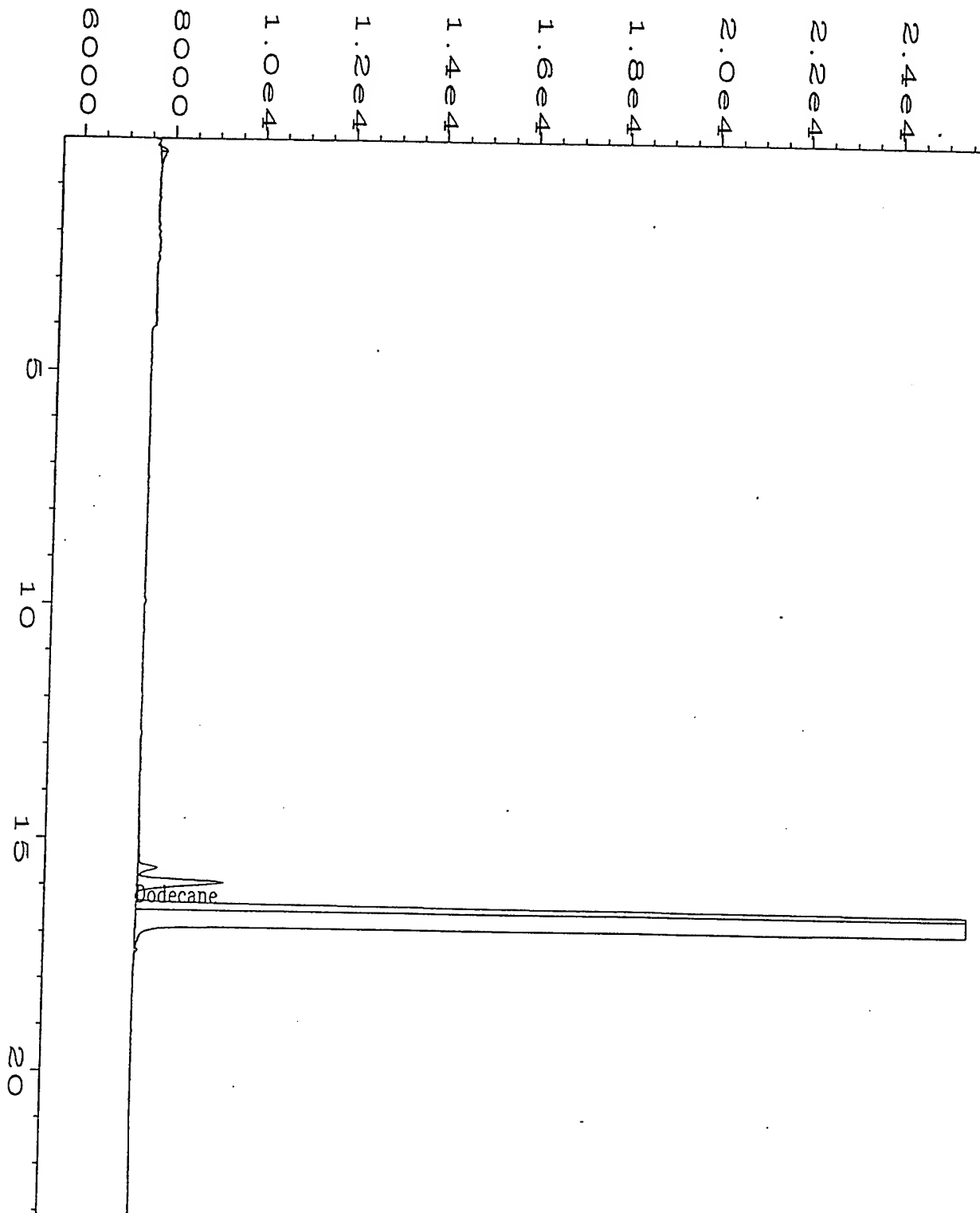
E = Extrapolated value.

RL = Reporting Limit.

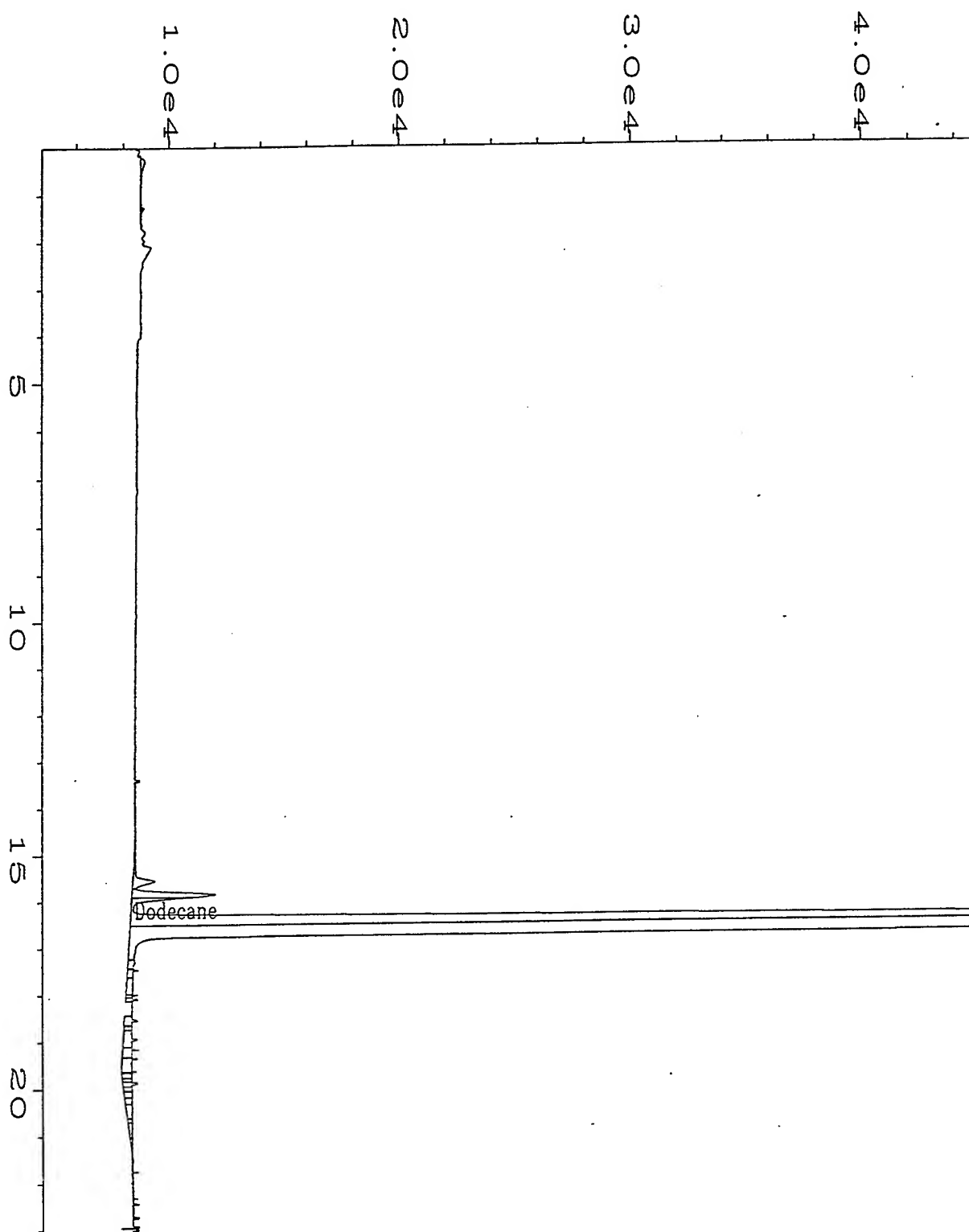
  
Analyst

  
Approved

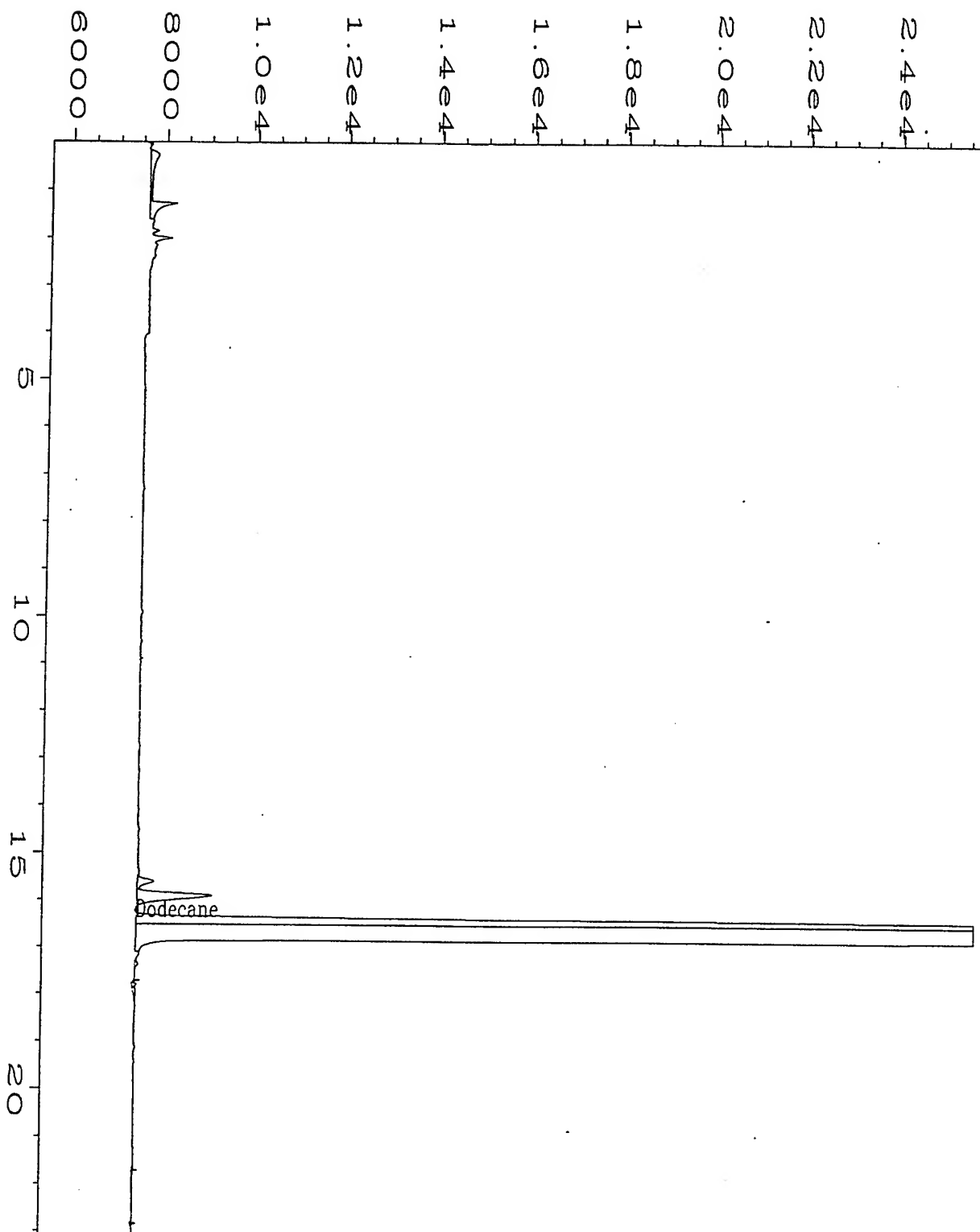
TVH1182.XLS



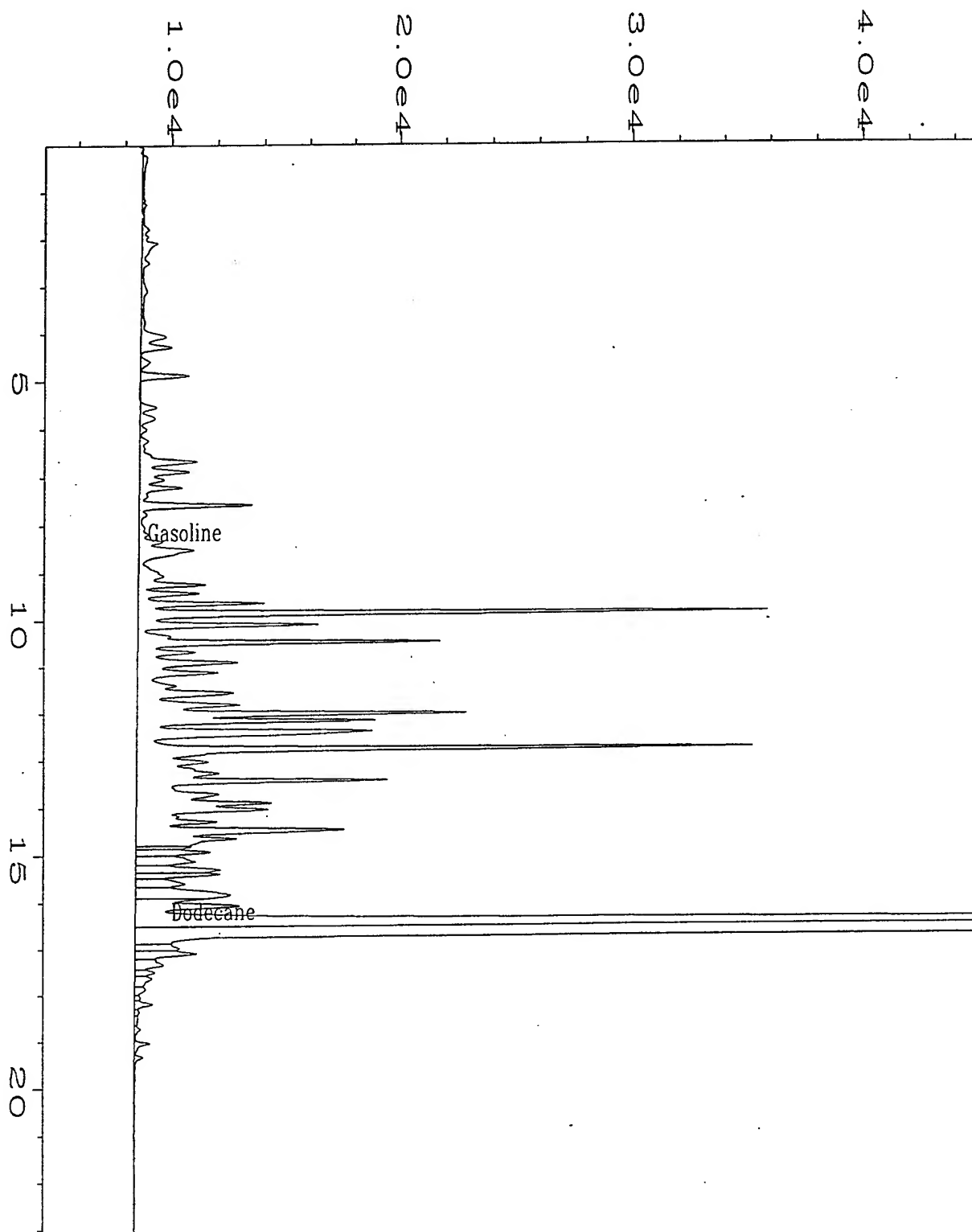
|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0421\010F0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 10          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : MB042195                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Acquired on        | : 21 Apr 95 02:26 PM                  | Analysis Method    | : TVH0421.MTH |
| Report Created on: | 24 Apr 95 09:25 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 01:34 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |



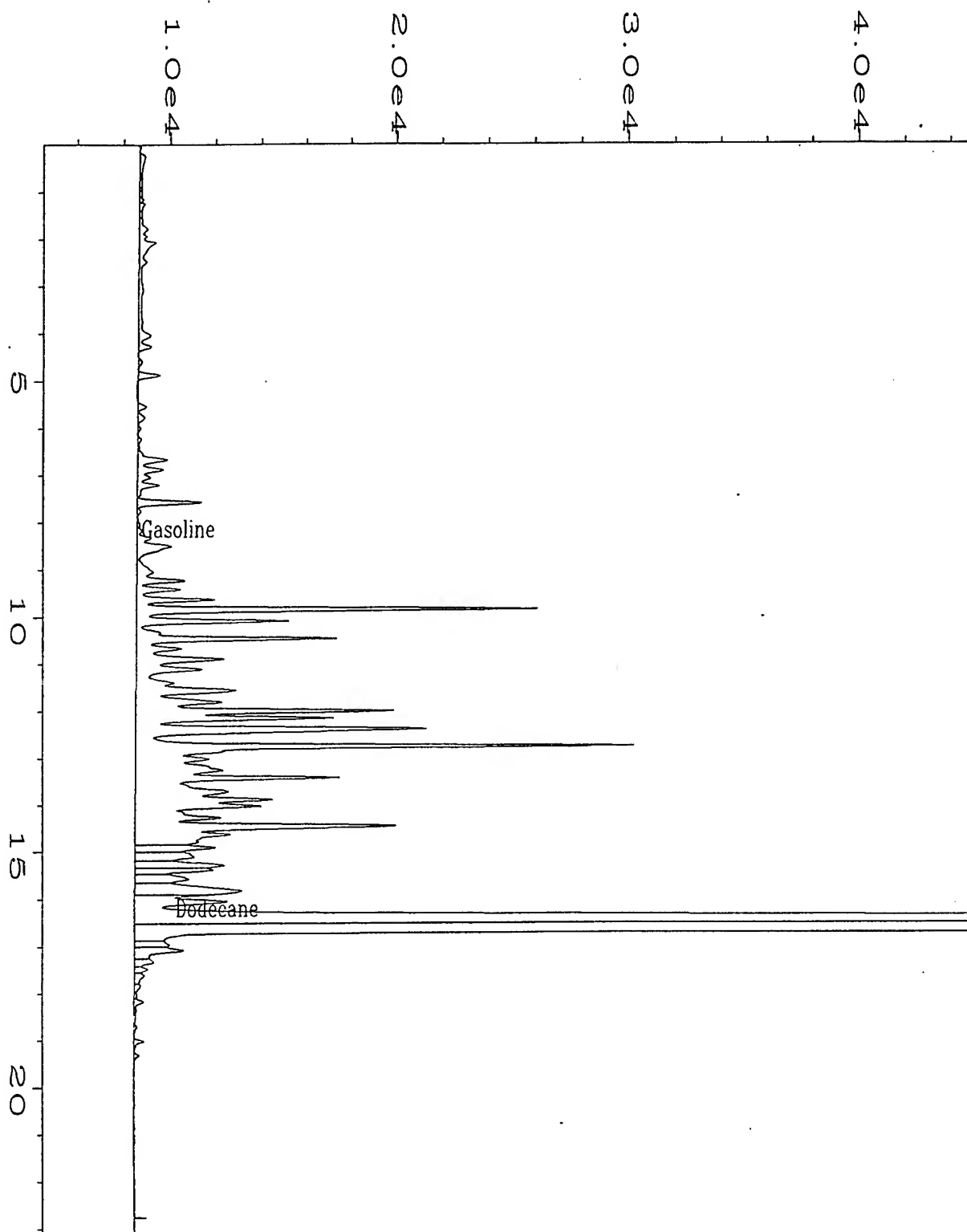
|                    |                                       |                    |           |
|--------------------|---------------------------------------|--------------------|-----------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0424\009F0101.D | Page Number        | : 1       |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 9       |
| Instrument         | : TVH                                 | Injection Number   | : 1       |
| Sample Name        | : mb042495                            | Sequence Line      | : 1       |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BAS   |
| Acquired on        | : 24 Apr 95 08:35 PM                  | Analysis Method    | : TVH0424 |
| Report Created on: | 25 Apr 95 00:26 AM                    | Sample Amount      | : 0       |
| Last Recalib on    | : 25 APR 95 00:21 AM                  | ISTD Amount        | :         |
| Multiplier         | : 1                                   |                    |           |



|                    |  |                    |               |
|--------------------|--|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0421\012F0101.D        | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                           | Vial Number        | : 12          |
| Instrument         | : TVH  | Injection Number   | : 1           |
| Sample Name        | : X05620;1;5                                 | Sequence Line      | : 1           |
| Run Time Bar Code: |  | Instrument Method: | TVH1BASE.MTH  |
| Acquired on        | : 21 Apr 95 03:46 PM                         | Analysis Method    | : TVH0421.MTH |
| Report Created on: | 24 Apr 95 09:25 AM                           | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 01:34 PM                         | ISTD Amount        | :             |
| Multiplier         | : 1  |                    |               |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-1 12-14 SOIL |                    |               |

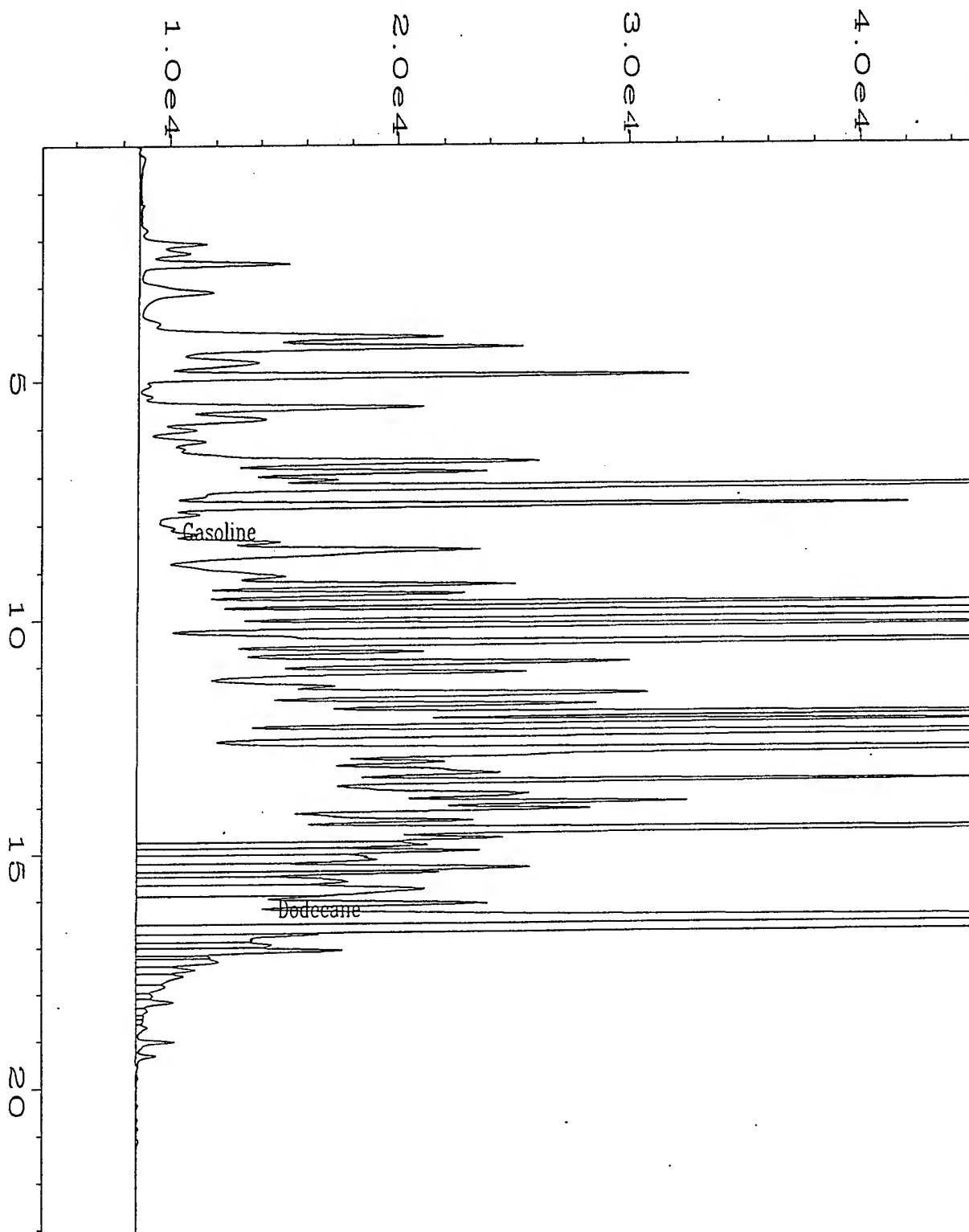


|                    |   |                   |           |
|--------------------|---|-------------------|-----------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0424\010F0101.D               | Page Number       | : 1       |
| Operator           | : Dawn N. Guildner                                  | Vial Number       | : 10      |
| Instrument         | : TVH   | Injection Number  | : 1       |
| Sample Name        | : X05621;50;.1                                      | Sequence Line     | : 1       |
| Run Time Bar Code: |   | Instrument Method | : TVH1BA  |
| Required on        | : 24 Apr 95 09:11 PM                                | Analysis Method   | : TVH0424 |
| Report Created on  | : 25 Apr 95 00:26 AM                                | Sample Amount     | : 0       |
| Last Recalib on    | : 25 APR 95 00:21 AM                                | ISTD Amount       | :         |
| Multiplier         | : 50  |                   |           |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-2 9 1/2-10 1/2 SOIL |                   |           |

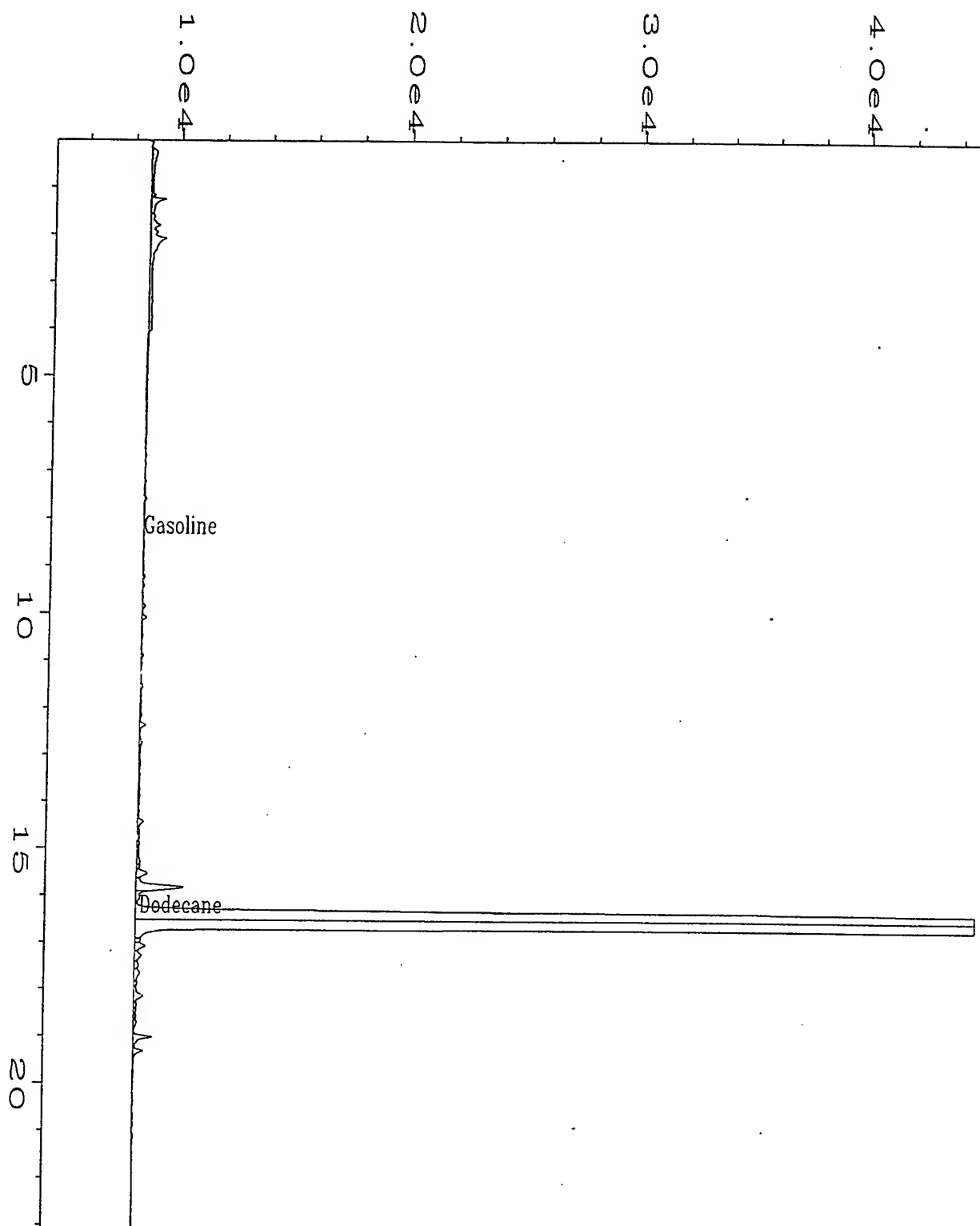


|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0424\011F0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 11          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X05621 DUP                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MT   |
| quired on          | : 24 Apr 95 09:47 PM                  | Analysis Method    | : TVH0424.MTH |
| port Created on:   | 25 Apr 95 00:26 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 25 APR 95 00:21 AM                  | ISTD Amount        | :             |
| Multiplier         | : 50                                  |                    |               |

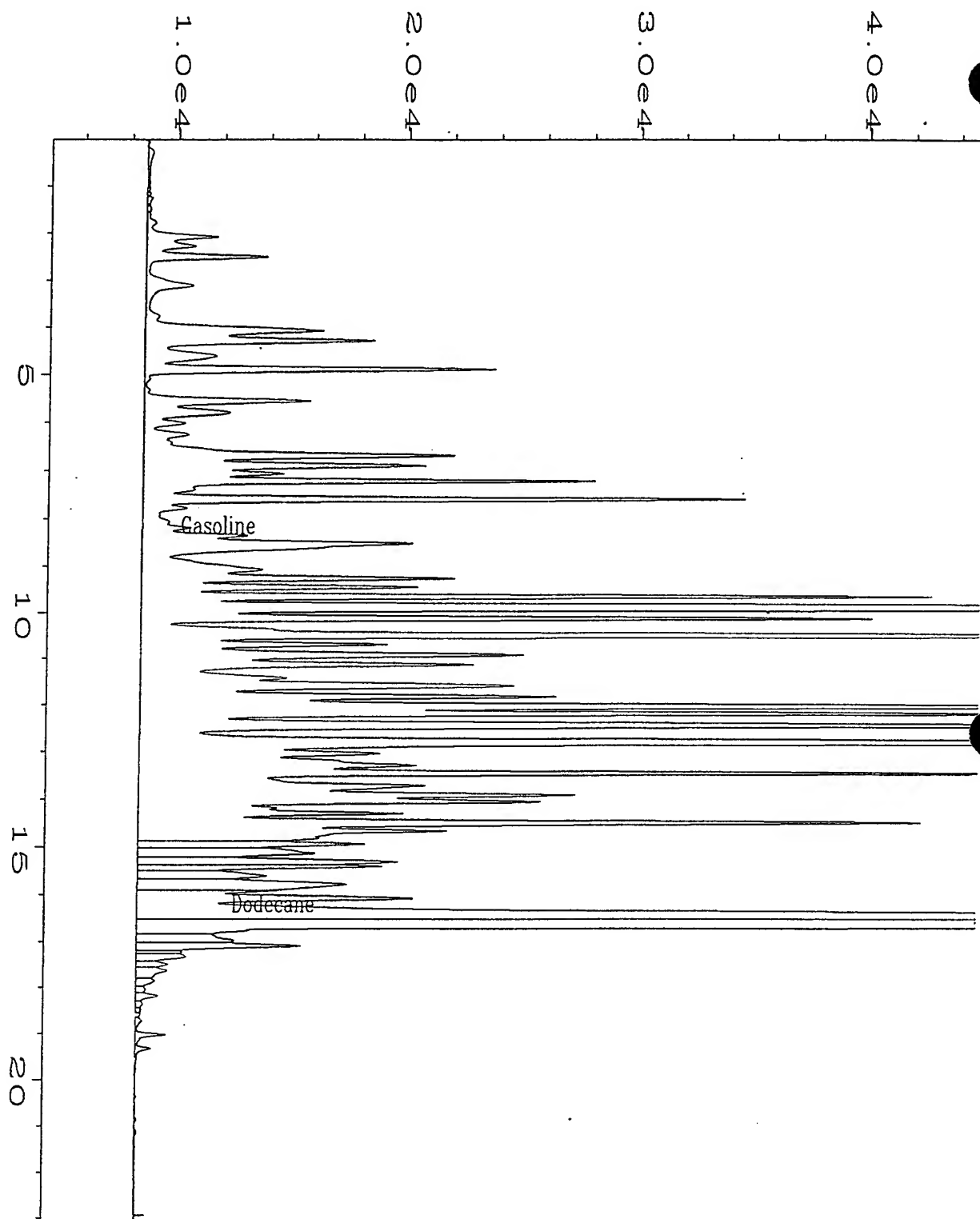
MW-2 9 1/2 - 10 1/2



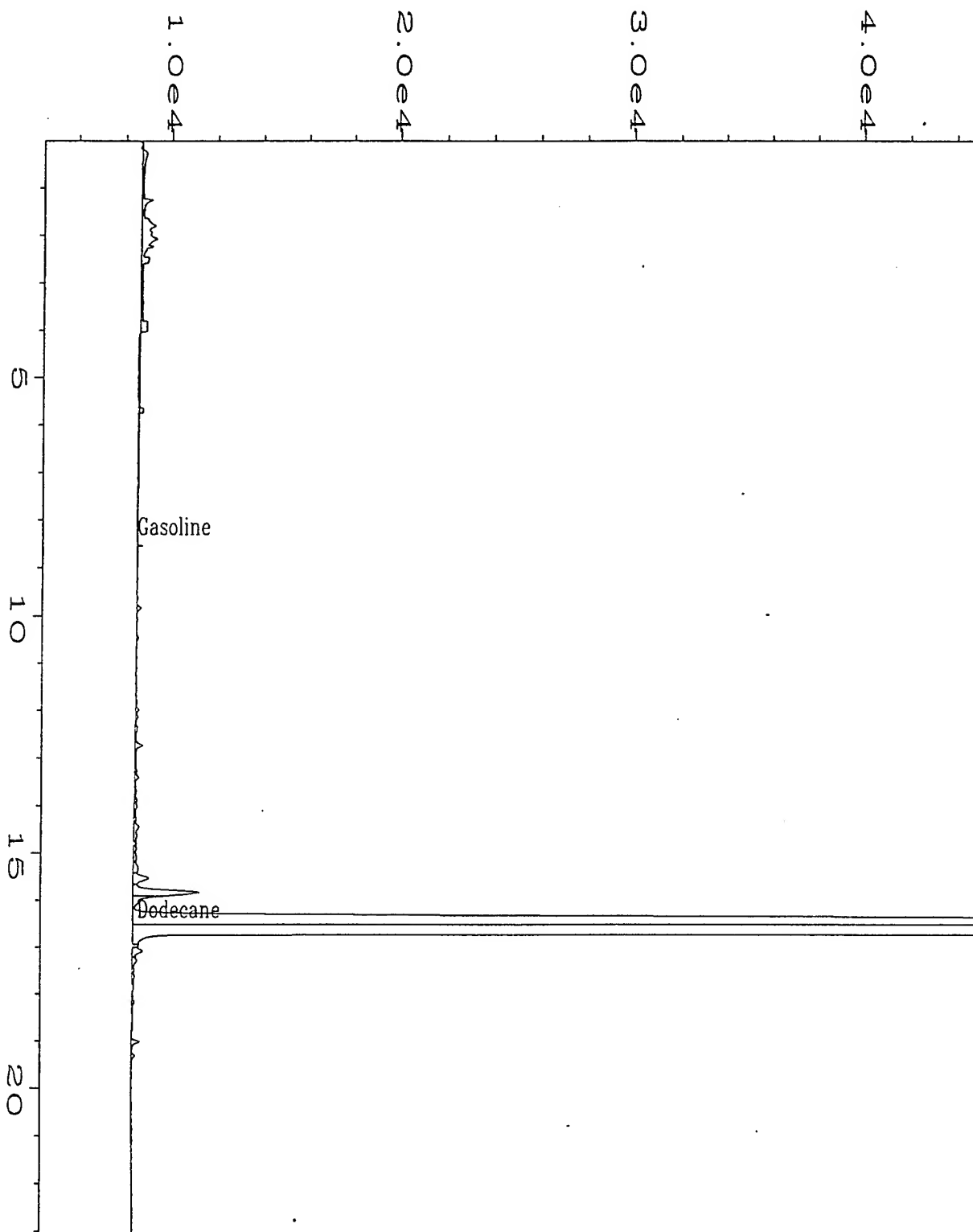
|                    |  |                    |              |
|--------------------|--|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0424\012F0101.D            | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 12         |
| Instrument         | : TVH  | Injection Number   | : 1          |
| Sample Name        | : X05622;50;.1                                   | Sequence Line      | : 1          |
| Run Time Bar Code: |  | Instrument Method: | TVH1BA M     |
| Acquired on        | : 24 Apr 95 10:23 PM                             | Analysis Method    | : TVH0424.MT |
| Report Created on: | 25 Apr 95 00:26 AM                               | Sample Amount      | : 0          |
| Last Recalib on    | : 25 APR 95 00:21 AM                             | ISTD Amount        | :            |
| Multiplier         | : 50   |                    |              |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-2 10 1/2-12 SOIL |                    |              |



|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0424\013F0101.D            | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                               | Vial Number       | : 13           |
| Instrument         | : TVH  | Injection Number  | : 1            |
| Sample Name        | : X05623;1;5                                     | Sequence Line     | : 1            |
| Run Time Bar Code: |  | Instrument Method | : TVH1BASE.MTH |
| Required on        | : 24 Apr 95 10:59 PM                             | Analysis Method   | : TVH0424.MTH  |
| Report Created on: | : 25 Apr 95 00:26 AM                             | Sample Amount     | : 0            |
| Last Recalib on    | : 25 APR 95 00:21 AM                             | ISTD Amount       | :              |
| Multiplier         | : 1  |                   |                |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-4 13 1/2-15 SOIL |                   |                |



|                    |  |                    |              |
|--------------------|--|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0424\014F0101.D            | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 14         |
| Instrument         | : TVH  | Injection Number   | : 1          |
| Sample Name        | : X05624;50;.1                                   | Sequence Line      | : 1          |
| Run Time Bar Code: |  | Instrument Method: | TVH1BA.M     |
| Acquired on        | : 24 Apr 95 11:35 PM                             | Analysis Method    | : TVH0424.MT |
| Port Created on:   | 25 Apr 95 00:27 AM                               | Sample Amount      | : 0          |
| Last Recalib on    | : 25 APR 95 00:21 AM                             | ISTD Amount        | :            |
| Multiplier         | : 50   |                    |              |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-4 12-13 1/2 SOIL |                    |              |



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0424\015F0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 15          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X05625;1;5                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Acquired on        | : 25 Apr 95 00:11 AM                  | Analysis Method    | : TVH0424.MTH |
| Report Created on: | 25 Apr 95 12:03 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 25 APR 95 00:21 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

MW-5 13-14 1/2

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021


TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
Laboratory Control Sample (LCS)

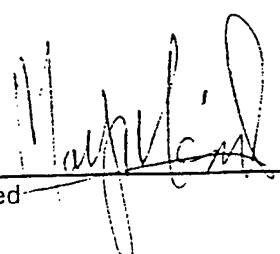
LCS Number : LCS042195      Matrix : SOIL  
Date Prepared : 4/21/95      Method Numbers : EPA 5030/8015 Modified  
Date Analyzed : 4/21/95  
Sequence Number : TVH9

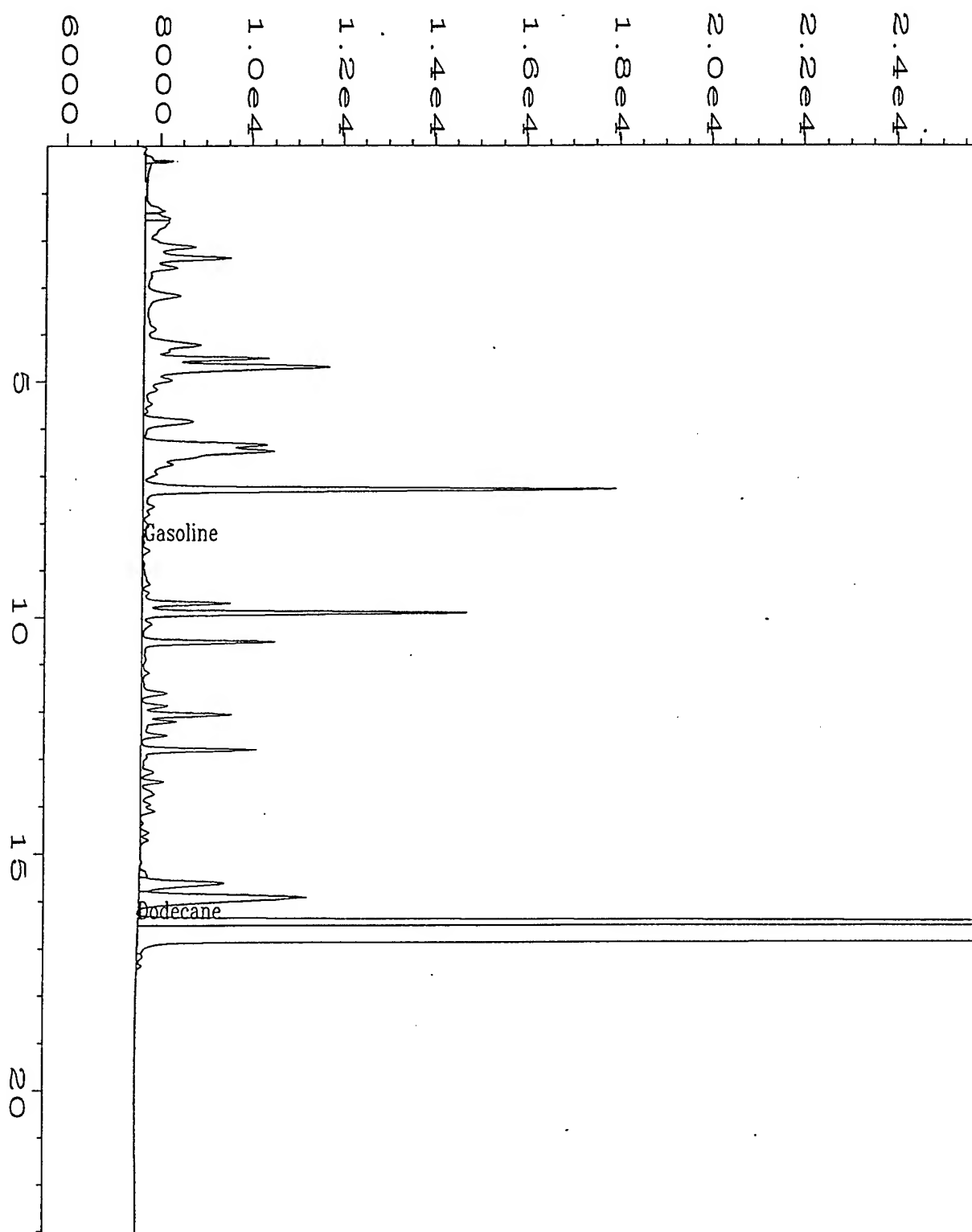
| <u>Compound Name</u> | <u>Theoretical Concentration mg/kg</u> | <u>LCS Concentration mg/kg</u> | <u>LCS % Recovery</u> | <u>QC Limit % Recovery</u> |
|----------------------|--|--------------------------------|-----------------------|----------------------------|
| Gasoline             | 5.00                                   | 5.85                           | 117%                  | 70%-130%                   |

QUALIFIERS

U = TVH analyzed for but not detected.  
B = TVH as Gasoline found in blank also.  
E = Extrapolated value.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0421\009F0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 9           |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : LCS042195                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Printed on         | : 21 Apr 95 01:46 PM                  | Analysis Method    | : TVH0421.MTH |
| Report Created on: | 08 May 95 09:52 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 24 APR 95 09:47 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021


TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
Laboratory Control Sample (LCS)

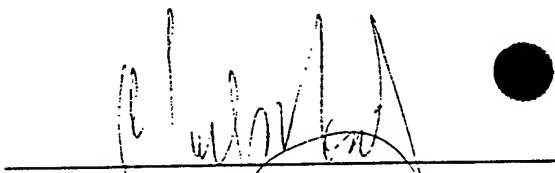
LCS Number : LCS042495      Matrix : SOIL  
Date Prepared : 4/24/95      Method Numbers : EPA 5030/8015 Modified  
Date Analyzed : 4/24/95  
Sequence Number : TVH8

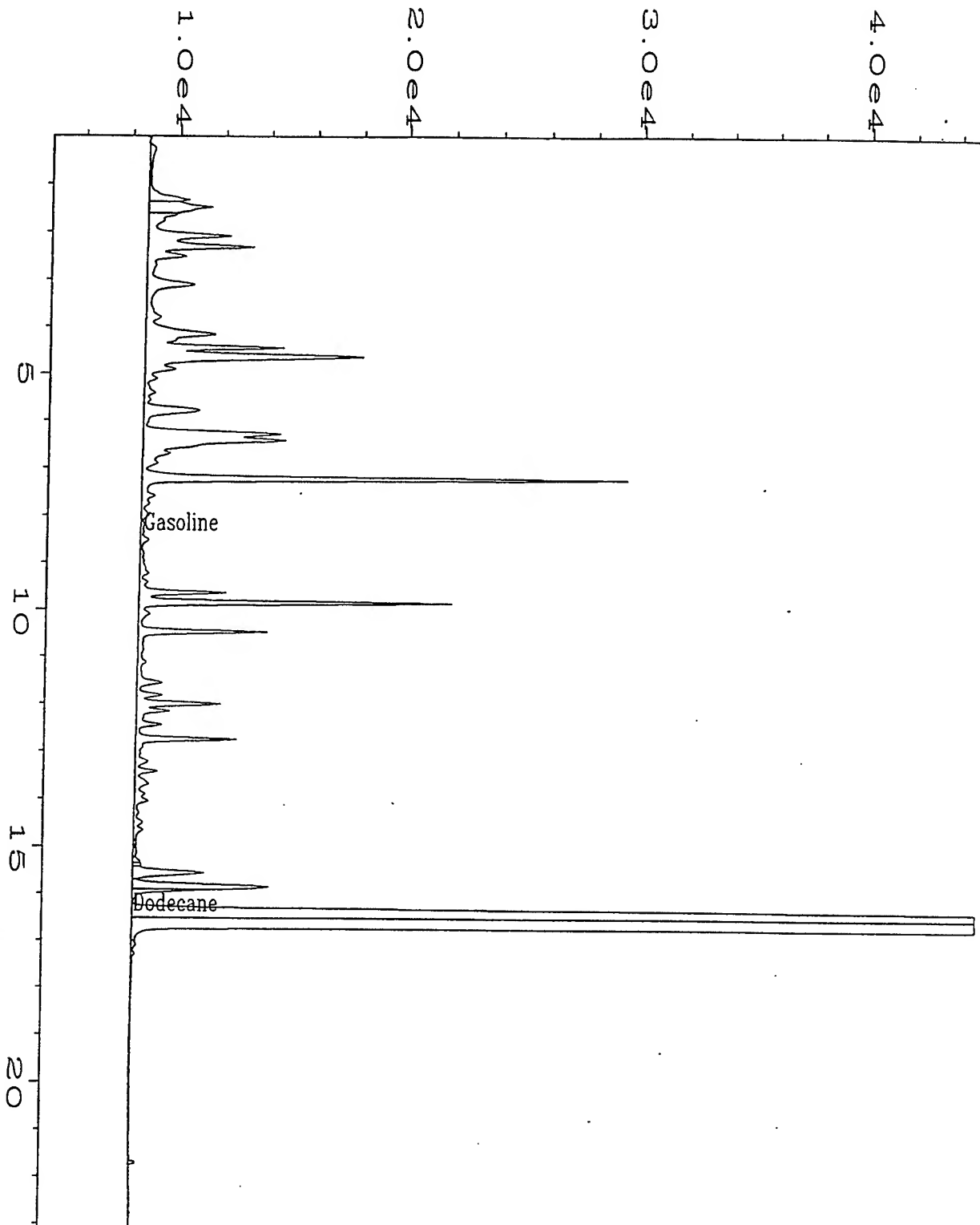
| <u>Compound<br/>Name</u> | <u>Theoretical<br/>Concentration<br/>mg/kg</u> | <u>LCS<br/>Concentration<br/>mg/kg</u> | <u>LCS<br/>%<br/>Recovery</u> | <u>QC Limit<br/>% Recovery</u> |
|--------------------------|--|--|-------------------------------|--------------------------------|
| Gasoline                 | 5.00   | 5.91                                   | 118%                          | 70%-130%                       |

QUALIFIERS

U = TVH analyzed for but not detected.  
B = TVH as Gasoline found in blank also.  
E = Extrapolated value.  
NA = Not Available/Not Applicable.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0424\008F0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 8            |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : lcs042495                           | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 24 Apr 95 07:59 PM                  | Analysis Method   | : TVH0424.MTH  |
| Report Created on  | : 25 Apr 95 00:25 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 25 APR 95 00:21 AM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL EXTRACTABLE HYDROCARBONS (TEH)  
JET FUEL

|               |              |                       |                       |
|---------------|--------------|-----------------------|-----------------------|
| Date Sampled  | : 4/10,11/95 | Client Project Number | : 722450.2602/SEYMORE |
| Date Received | : 4/12/95    | Lab Project Number    | : 95-1182             |
| Date Prepared | : 4/13/95    | Matrix                | : Soil                |
| Date Analyzed | : 4/18,19/95 | Method Number         | : 3500/Mod. 8015      |

| Evergreen<br>Sample # | Client<br>Sample # | OTP<br>Surrogate<br>% Recovery | TEH<br>Jet Fuel<br>mg/Kg | RL<br>mg/Kg |
|-----------------------|--------------------|--------------------------------|--------------------------|-------------|
| SB041395              | SOIL METHOD BLANK  | 92%                            | U                        | 10          |
| X05620                | MW-1 12-14         | 82%                            | U                        | 13          |
| X05621                | MW-2 9 1/2-10 1/2  | *                              | 2300                     | 120         |
| X05622                | MW-2 10 1/2-12     | *                              | 8800                     | 130         |
| X05623                | MW-4 13 1/2-15     | 86%                            | 19                       | 11          |
| X05624                | MW-4 12-13 1/2     | *                              | 5300                     | 130         |
| X05625                | MW-5 13-14 1/2     | 87%                            | U                        | 13          |

OTP Soil Surrogate % Recovery limits: 60% - 118%

\* = Diluted out.


QUALIFIERS

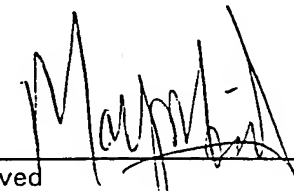
U = TEH analyzed for but not detected.

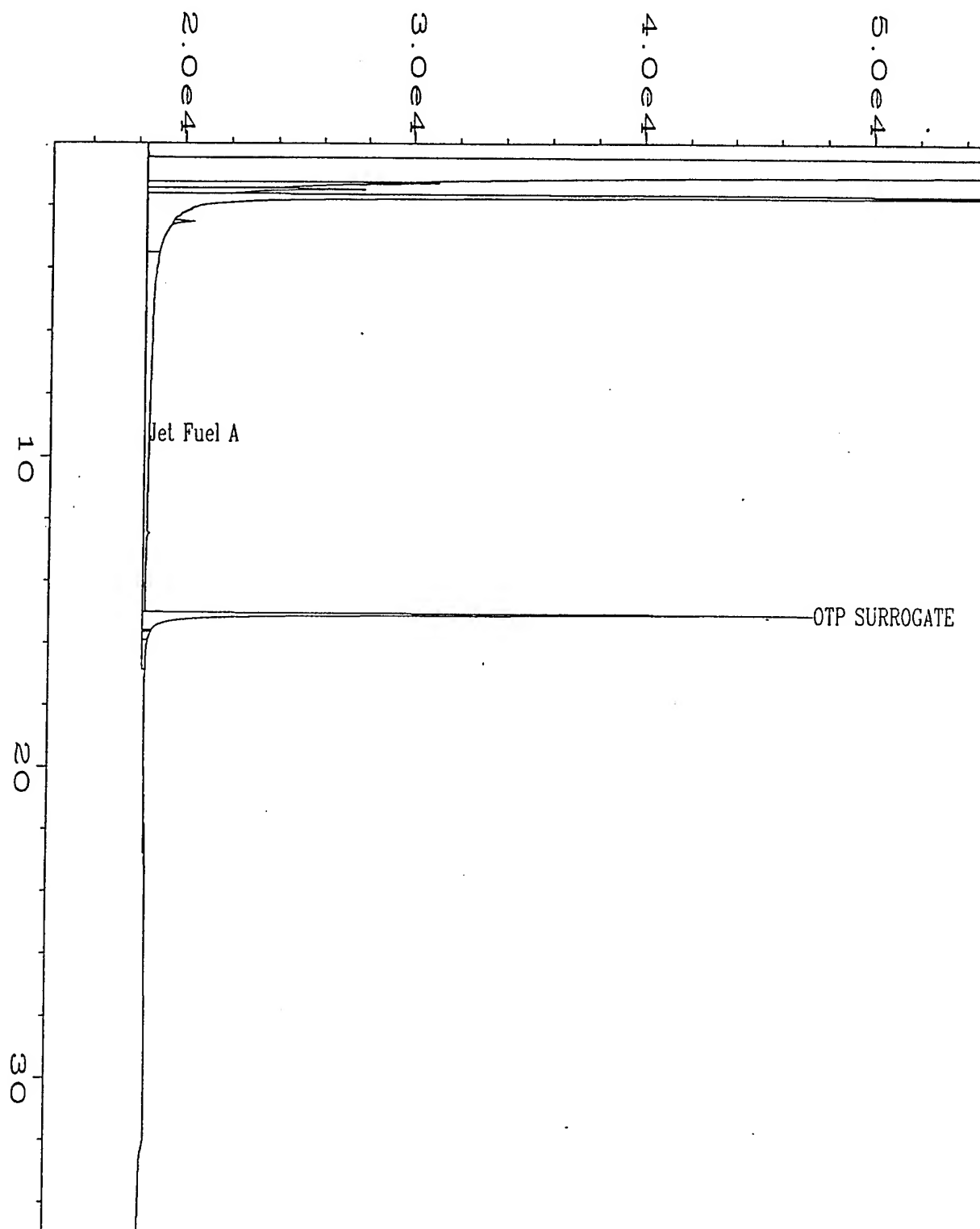
B = TEH found in blank as well as sample (blank data should be compared).

E = Extrapolated value.

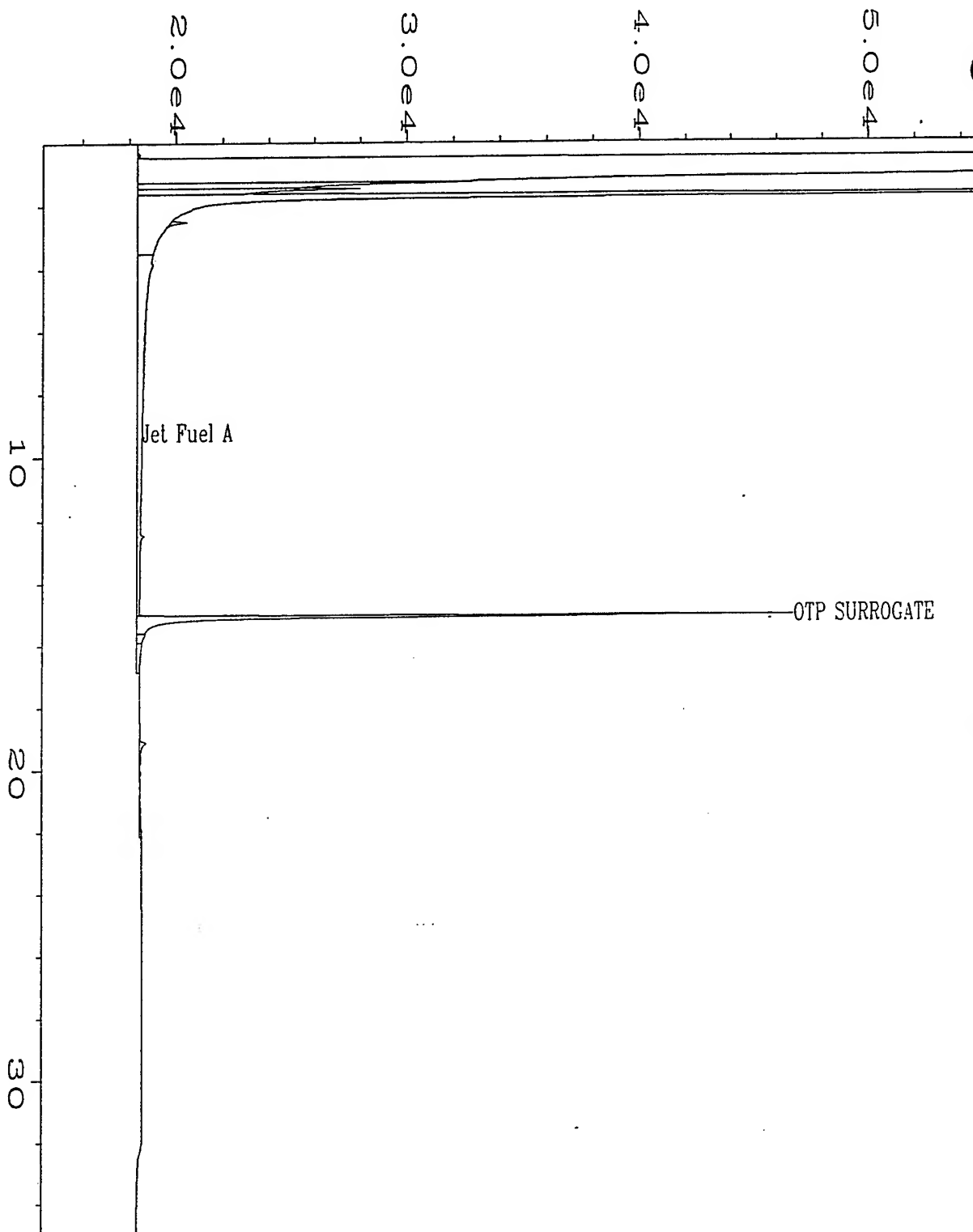
RL = Reporting Limit

  
Analyst

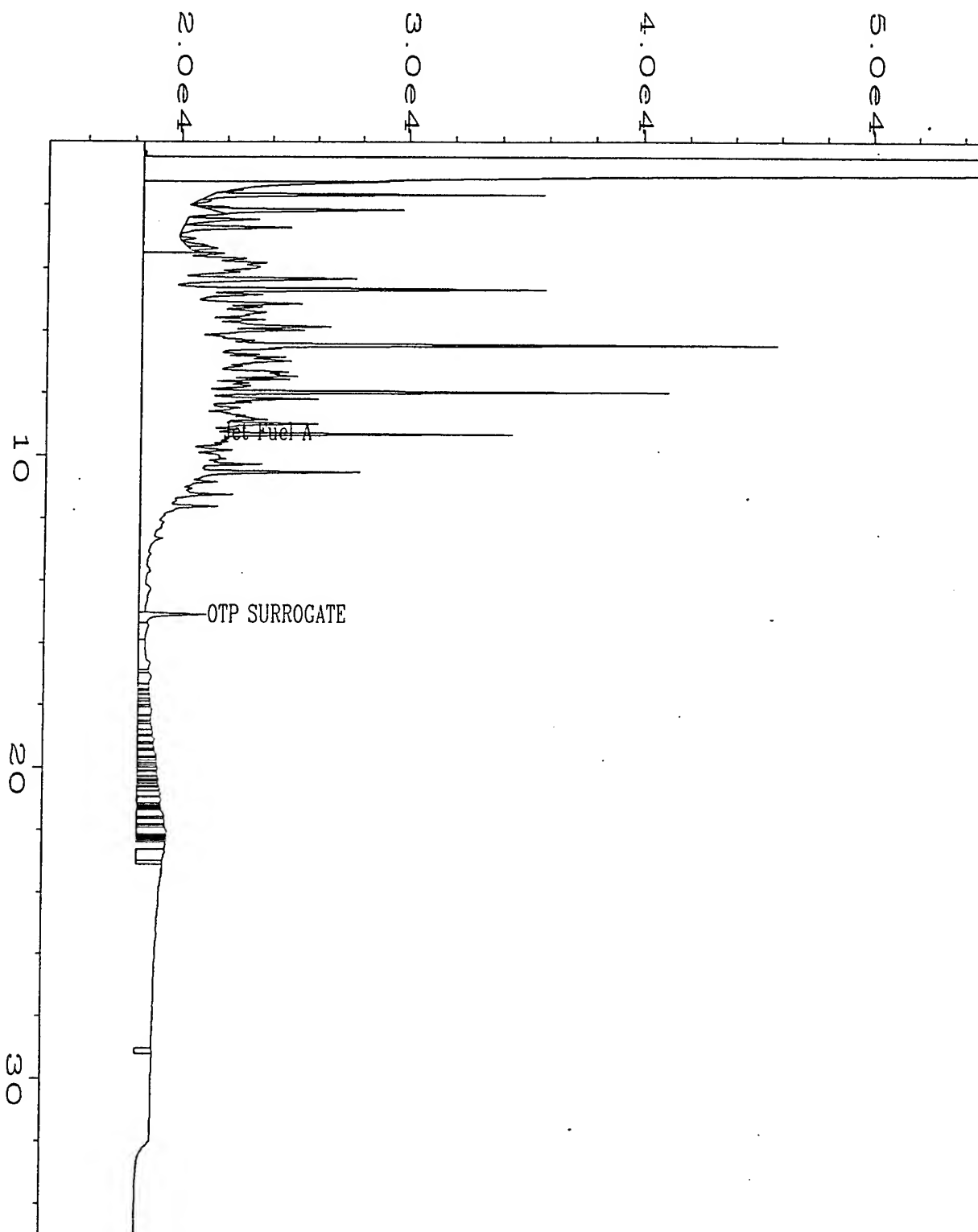
  
Approved



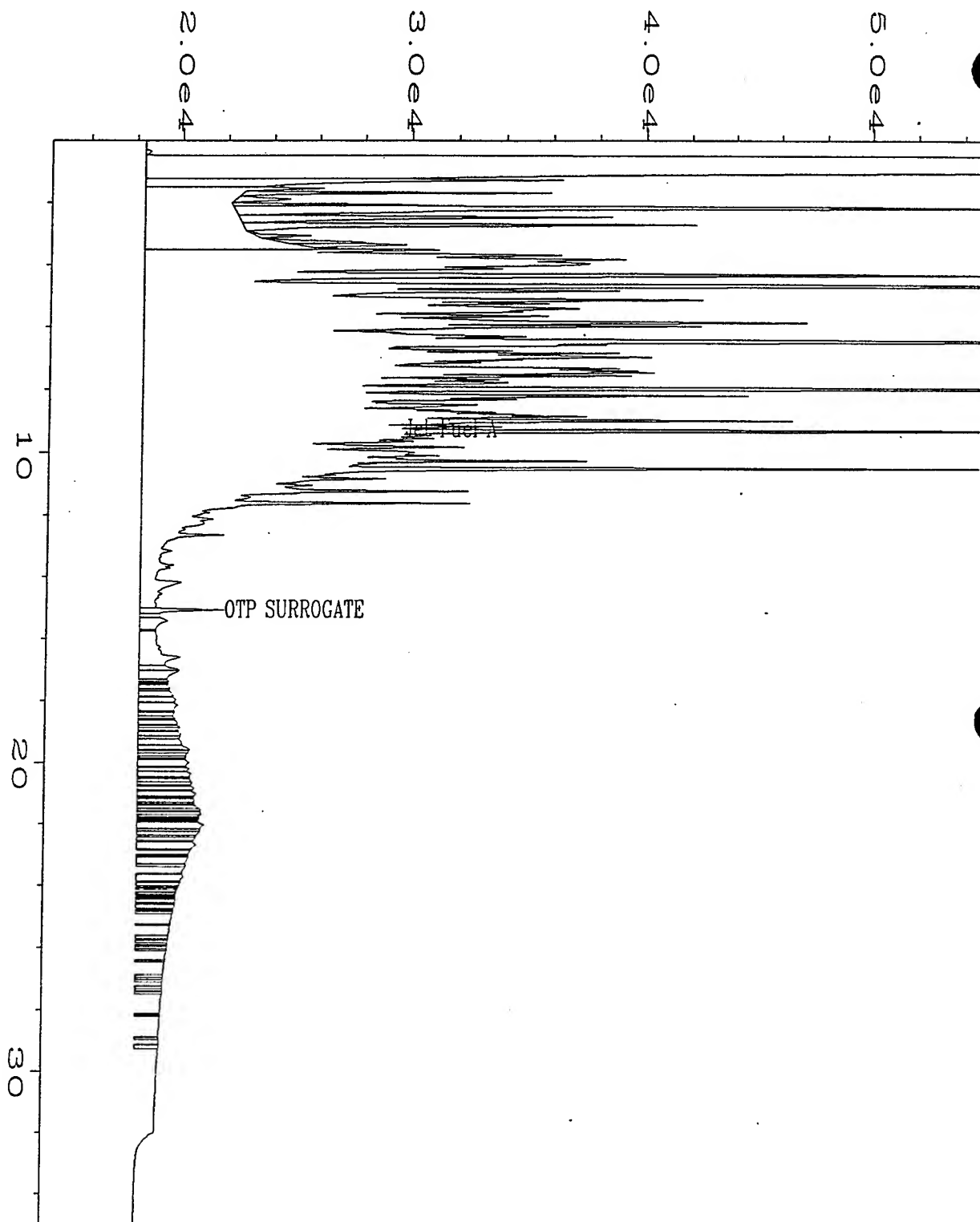
|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\012R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 12           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : SB041395                            | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 18 Apr 95 07:16 PM                  | Analysis Method   | : JET0418.MTH  |
| Report Created on  | : 19 Apr 95 10:15 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 18 APR 95 06:54 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |



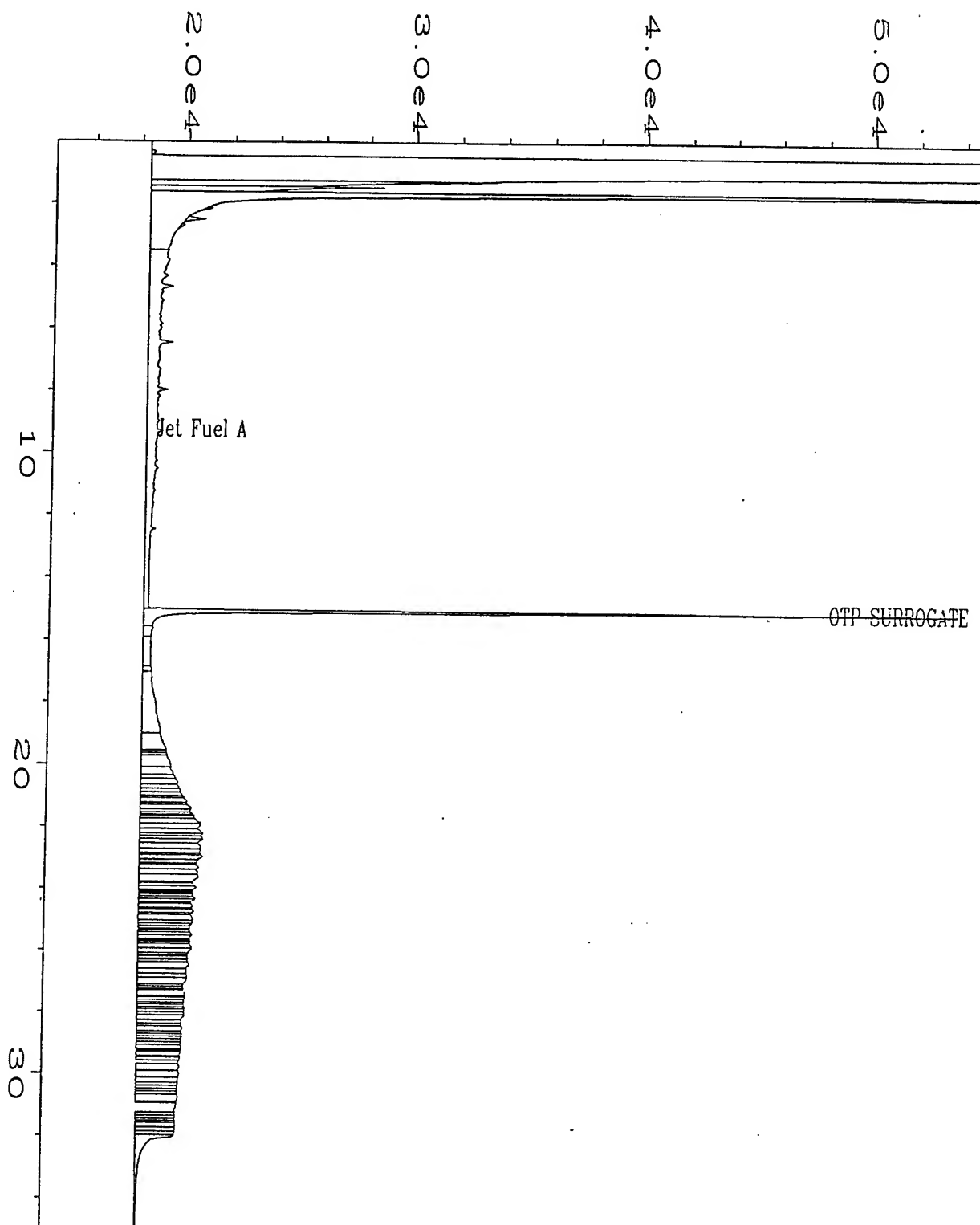
|                    |  |                   |              |
|--------------------|--|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\013R0101.D        | Page Number       | : 1          |
| Operator           | : Dawn N. Guildner                           | Vial Number       | : 13         |
| Instrument         | : TEH  | Injection Number  | : 1          |
| Sample Name        | : X05620 DF=1                                | Sequence Line     | : 1          |
| Run Time Bar Code: |  | Instrument Method | : FID1BA M   |
| Acquired on        | : 18 Apr 95 08:02 PM                         | Analysis Method   | : JET0418.MT |
| Report Created on  | : 19 Apr 95 10:15 AM                         | Sample Amount     | : 0          |
| Last Recalib on    | : 18 APR 95 06:54 PM                         | ISTD Amount       | :            |
| Multiplier         | : 1  |                   |              |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-1 12-14 SOIL |                   |              |



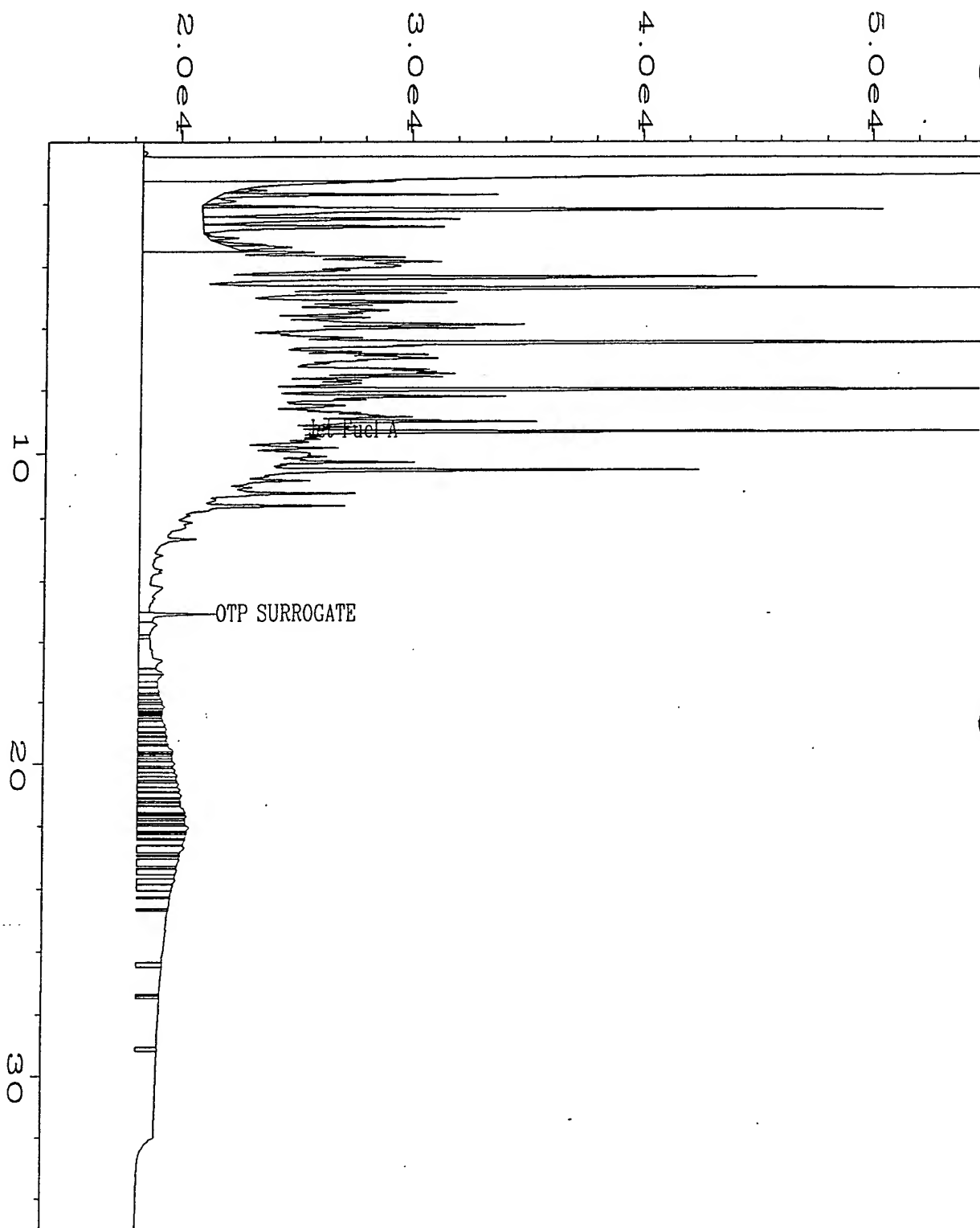
|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\036R0101.D               | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                                  | Vial Number       | : 36           |
| Instrument         | : TEH   | Injection Number  | : 1            |
| Sample Name        | : X05621 DF=10                                      | Sequence Line     | : 1            |
| Run Time Bar Code: |   | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 19 Apr 95 02:44 PM                                | Analysis Method   | : JET0418.MTH  |
| Report Created on: | : 20 Apr 95 09:24 AM                                | Sample Amount     | : 0            |
| Last Recalib on    | : 18 APR 95 06:54 PM                                | ISTD Amount       | :              |
| Multiplier         | : 10  |                   |                |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-2 9 1/2-10 1/2 SOIL |                   |                |



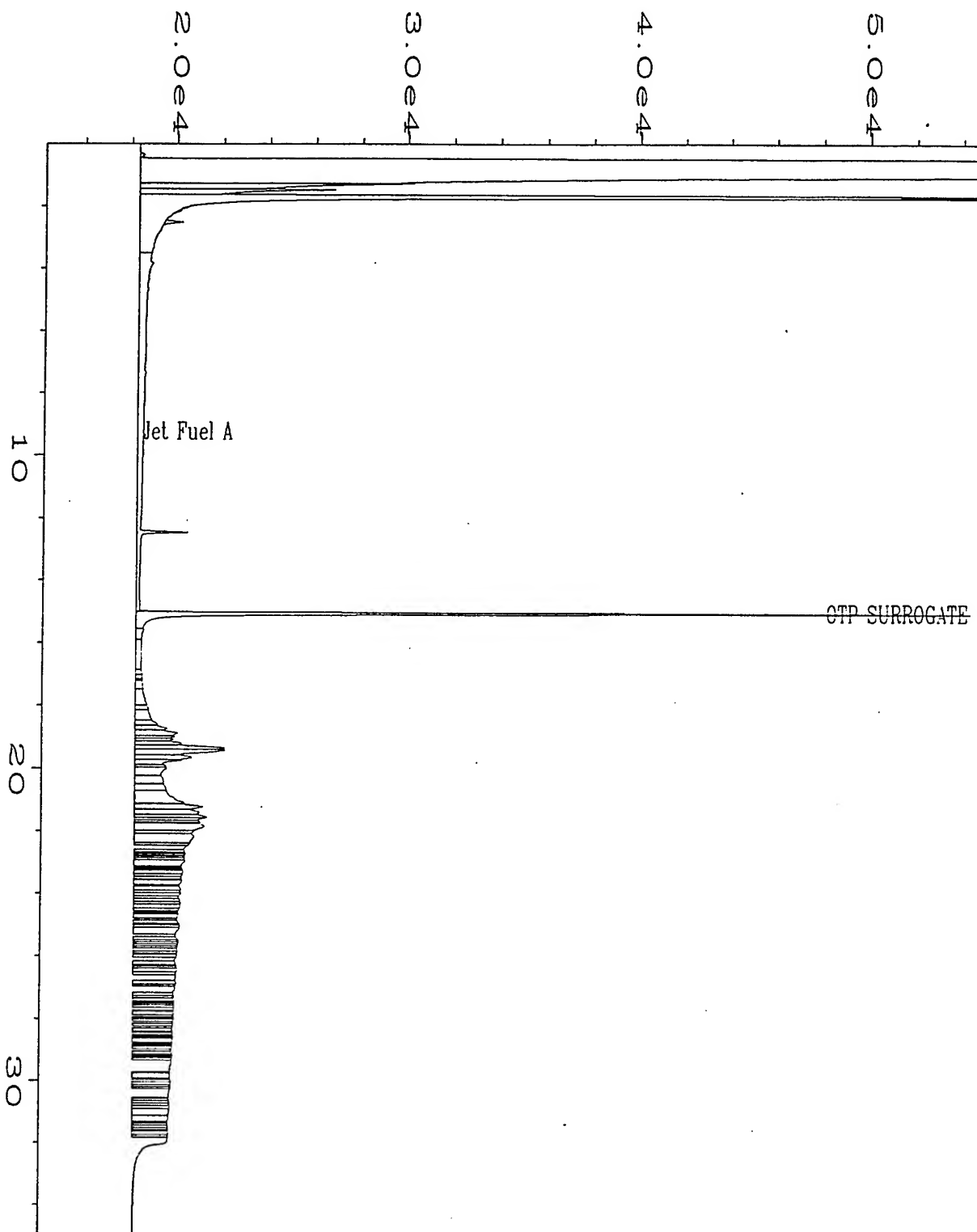
|                    |  |                    |              |
|--------------------|--|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\037R0101.D            | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 37         |
| Instrument         | : TEH  | Injection Number   | : 1          |
| Sample Name        | : X05622 DF=10                                   | Sequence Line      | : 1          |
| Run Time Bar Code: |  | Instrument Method: | FID1BAS.M    |
| Acquired on        | : 19 Apr 95 03:31 PM                             | Analysis Method    | : JET0418.MT |
| Report Created on: | 20 Apr 95 09:24 AM                               | Sample Amount      | : 0          |
| Last Recalib on    | : 18 APR 95 06:54 PM                             | ISTD Amount        | :            |
| Multiplier         | : 10   |                    |              |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-2 10 1/2-12 SOIL |                    |              |



|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\016R0101.D            | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                               | Vial Number       | : 16           |
| Instrument         | : TEH  | Injection Number  | : 1            |
| Sample Name        | : X05623 DF=1                                    | Sequence Line     | : 1            |
| Run Time Bar Code: |  | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 18 Apr 95 10:21 PM                             | Analysis Method   | : JET0418.MTH  |
| Report Created on: | : 19 Apr 95 10:16 AM                             | Sample Amount     | : 0            |
| Last Recalib on    | : 18 APR 95 06:54 PM                             | ISTD Amount       | :              |
| Multiplier         | : 1  |                   |                |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-4 13 1/2-15 SOIL |                   |                |



|                    |  |                    |              |
|--------------------|--|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\038R0101.D            | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 38         |
| Instrument         | : TEH  | Injection Number   | : 1          |
| Sample Name        | : X05624 DF=10                                   | Sequence Line      | : 1          |
| Run Time Bar Code: |  | Instrument Method: | FID1BA M     |
| Acquired on        | : 19 Apr 95 04:17 PM                             | Analysis Method    | : JET0418.MT |
| Report Created on: | 20 Apr 95 09:24 AM                               | Sample Amount      | : 0          |
| Last Recalib on    | : 18 APR 95 06:54 PM                             | ISTD Amount        | :            |
| Multiplier         | : 10   |                    |              |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-4 12-13 1/2 SOIL |                    |              |



|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\018R0101.D            | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                               | Vial Number       | : 18           |
| Instrument         | : TEH  | Injection Number  | : 1            |
| Sample Name        | : X05625 DF=1                                    | Sequence Line     | : 1            |
| Run Time Bar Code: |  | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 18 Apr 95 11:53 PM                             | Analysis Method   | : JET0418.MTH  |
| Report Created on  | : 19 Apr 95 10:16 AM                             | Sample Amount     | : 0            |
| Last Recalib on    | : 18 APR 95 06:54 PM                             | ISTD Amount       | :              |
| Multiplier         | : 1  |                   |                |
| Sample Info        | : PROJECT # 95-1182 CLIENT # MW-5 13-14 1/2 SOIL |                   |                |

**HUFFMAN**

LABORATORIES, INC.

Quality Analytical Services Since 1936

4630 Indiana Street • Golden, CO 80403

**NON-CLP ANALYSIS RESULTS**

Date: 05/01/95

Lab Name: Huffman Labs

Contact: Sue Zeller

Sample Matrix: soil

Client: Evergreen Analytical

Contact: Patty McClellan

Huffman Lab #: 160795

| Client Smp#       | Lab ID # | Element/Compound | Dilution Factor | Results         | Units  | Prep Date | Analysis Date | Sample Size (g) | Method #  | Instrument ID |
|-------------------|----------|------------------|-----------------|-----------------|--------|-----------|---------------|-----------------|-----------|---------------|
| MW1(12-14)BLS     | 16079501 | TC               | NA              | 0.05            | %      | NA        | 04/27/95      | 0.374           | Leco CR12 | #7            |
| MW1(12-14)BLS     | 16079501 | TC               | NA              | 0.07            | %      | NA        | 04/27/95      | 0.325           | Leco CR12 | #7            |
| MW5(13-14.5)      | 16079502 | TC               | NA              | <0.05           | %      | NA        | 04/27/95      | 0.503           | Leco CR12 | #7            |
| MW6(16-16.5)      | 16079503 | TC               | NA              | 0.31            | %      | NA        | 04/27/95      | 0.540           | Leco CR12 | #7            |
| MW10(10-11)       | 16079504 | TC               | NA              | 0.09            | %      | NA        | 04/27/95      | 0.358           | Leco CR12 | #7            |
| MW11(11.5-13.5)   | 16079505 | TC               | NA              | <0.05           | %      | NA        | 04/27/95      | 0.341           | Leco CR12 | #7            |
| MW1(12-14)BLS     | 16079501 | CC               | NA              | <0.02           | %      | NA        | 04/27/95      | 0.208           | COU-02    | tower         |
| MW1(12-14)BLS     | 16079501 | CC               | NA              | <0.02           | %      | NA        | 04/27/95      | 0.380           | COU-02    | tower         |
| MW5(13-14.5)      | 16079502 | CC               | NA              | <0.02           | %      | NA        | 04/27/95      | 0.158           | COU-02    | tower         |
| MW6(16-16.5)      | 16079503 | CC               | NA              | <0.02           | %      | NA        | 04/27/95      | 0.120           | COU-02    | tower         |
| MW10(10-11)       | 16079504 | CC               | NA              | <0.02           | %      | NA        | 04/27/95      | 0.237           | COU-02    | tower         |
| MW11(11.5-13.5)   | 16079505 | CC               | NA              | <0.02           | %      | NA        | 04/27/95      | 0.125           | COU-02    | tower         |
|                   |          | % moisture       |                 | adjusted result |        |           |               |                 |           |               |
| 182 MW1(12-14)BLS | 16079501 | 20.44 TOC        | NA              | 0.05            | 0.06 % | NA        | NA            | NA              | by calc   | NA            |
| MW1(12-14)BLS     | 16079501 | 20.44 TOC        | NA              | 0.07            | 0.09 % | NA        | NA            | NA              | by calc   | NA            |
| MW5(13-14.5)      | 16079502 | 22.72 TOC        | NA              | <0.05           | 0.06 % | NA        | NA            | NA              | by calc   | NA            |
| 1217 MW6(16-16.5) | 16079503 | TOC              | NA              | 0.31            | %      | NA        | NA            | NA              | by calc   | NA            |
| MW10(10-11)       | 16079504 | TOC              | NA              | 0.09            | %      | NA        | NA            | NA              | by calc   | NA            |
| MW11(11.5-13.5)   | 16079505 | TOC              | NA              | <0.05           | %      | NA        | NA            | NA              | by calc   | NA            |

Samples analyzed and results reported on as as received basis.

Soil samples are not homogeneous.

As per client instructions, analytical aliquot taken from end of core tube.

Analytical aliquot is not thought to be representative of the entire sample.

Values reported below Detection Limits are for reference only.

TC detection limit = 0.05 %

CC detection limit = 0.02 %

TOC detection limit = 0.05 %

# HUFFMAN

LABORATORIES, INC.

Quality Analytical Services Since 1936

4630 Indiana Street • Golden, CO 80403

## NON-CLP ANALYSIS RESULTS LABORATORY CONTROL STANDARD

Date: 05/01/95  
Lab Name: Huffman Labs  
Contact: Sue Zeller

Client: Evergreen Analytical  
Contact: Patty McClellan  
Huffman Lab #: 160795

### LABORATORY CONTROL STANDARD

| Lab<br>ID # | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|-------------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| LCS         | BN 4851 | TC                   | 3.35          | 3.39           | 101 | %     | 04/27/95 | Leco CR12   | #7               |
| LCS         | BN 4056 | CC                   | 11.33         | 11.34          | 100 | %     | 04/27/95 | COU-02      | tower            |
| LCS         | BN 4056 | CC                   | 11.33         | 11.46          | 101 | %     | 04/28/95 | COU-02      | tower            |

### SPIKE RECOVERY

| Lab<br>ID # | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|-------------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| SPIKE       | BN 4712 | TC                   | 12600         | 12482          | 99  | ug C  | 04/27/95 | Leco CR12   | #7               |
| SPIKE DUP   | BN 4712 | TC                   | 12120         | 12076          | 100 | ug C  | 04/27/95 | Leco CR12   | #7               |
| SPIKE       | BN 4712 | CC                   | 525           | 529            | 101 | ug C  | 04/28/95 | COU-02      | tower            |
| SPIKE DUP   | BN 4712 | CC                   | 737           | 729            | 99  | ug C  | 04/28/95 | COU-02      | tower            |

PD = Prep date

# HUFFMAN

LABORATORIES, INC.

Quality Analytical Services Since 1936

4630 Indiana Street • Golden, CO 80403

## NON-CLP QA/QC ANALYSIS RESULTS INITIAL AND CONTINUING CALIBRATION VERIFICATION

Date: 05/01/95 Client: Evergreen Analytical  
Lab Name: Huffman Labs Contact: Patty McClellan  
Contact: Sue Zeller Huffman Lab #: 160795

### INITIAL CALIBRATION

| Lab ID # | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|----------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| ICS      | BN 4712 | TC                   | 12.00         | 11.91          | 99  | %     | 04/27/95 | Leco CR12   | #7               |
| ICS      | BN 4712 | CC                   | 12.00         | 11.95          | 100 | %     | 04/27/95 | COU-02      | tower            |
| ICS      | BN 4712 | CC                   | 12.00         | 12.04          | 100 | %     | 04/28/95 | COU-02      | tower            |

Slope =

NA

Intercept =

NA

95% Correlation Coefficient =

NA

Single point calibrations for this test.

### CONTINUING CALIBRATION VERIFICATION

| Lab ID # | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|----------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| CCS      | BN 4712 | TC                   | 12.00         | 11.98          | 100 | %     | 04/27/95 | Leco CR12   | #7               |
| CCS      | BN 4712 | TC                   | 12.00         | 11.94          | 100 | %     | 04/27/95 | Leco CR12   | #7               |
| CCS      | BN 4712 | CC                   | 12.00         | 12.11          | 101 | %     | 04/27/95 | COU-02      | tower            |
| CCS      | BN 4712 | CC                   | 12.00         | 12.17          | 101 | %     | 04/28/95 | COU-02      | tower            |

**HUFFMAN**

LABORATORIES, INC.

Quality Analytical Services Since 1936

4630 Indiana Street • Golden, CO 80403

ANALYSIS : TOTAL CARBON

METHOD : HIGH TEMP  
COMB. - INFRARED DET.

INSTRUMENT : LECO CR12

ANALYZER # 7

BALANCE # 19

D. CALCIUM CARBONATE

STD. N.I.S.T. BUFFALO RIVER SEDIMENT (BRS)

12.00 %C (theory)

BN 1/7/12

3.348 %C (theory)

BN 4/8/51

| SAMPLE #          | SAMPLE WT G |                               |       | % CARBON PRE-CALIB | % CARBON POST-CALIB | QC           | % REC. |
|-------------------|-------------|-------------------------------|-------|--------------------|---------------------|--------------|--------|
|                   |             |                               |       |                    |                     |              |        |
|                   |             |                               |       |                    |                     |              |        |
|                   |             |                               |       |                    |                     |              |        |
|                   |             |                               |       |                    |                     |              |        |
| CaCO <sub>3</sub> | 1170        |                               |       | 11.81              | 11.91               | ICS          | 99.3   |
|                   |             |                               |       |                    |                     |              |        |
|                   |             |                               |       |                    |                     |              |        |
| CaCO <sub>3</sub> | 1160        | CaCO <sub>3</sub> 1000        | 11.84 | 11.98              |                     | CCS          |        |
| MB                | 1           |                               |       |                    | 0.05                |              |        |
|                   |             |                               |       |                    |                     |              |        |
|                   |             |                               |       |                    |                     |              |        |
| IB                | 1           |                               |       |                    | 0.05                |              |        |
| BRS               | 12520       |                               |       |                    | 3.388               | LCS          | 101.2  |
| 1607-01           | 3740        | Mix 1607                      |       |                    | 0.050               | Trace Qc dup |        |
| 1607-01           | 3250        |                               |       |                    | 0.067               | amount Qc    | 14.5   |
| 1607-01           | 3340        | CaCO <sub>3</sub> spike 10.50 |       |                    | (3.797)             |              |        |
| 1607-01           | 3080        | CaCO <sub>3</sub> spike 11.1  |       |                    | (3.981)             |              |        |
| 1607-02           | 5030        |                               |       |                    | 1.036               |              |        |
| 1607-04           | 3580        |                               |       |                    | 0.088               |              |        |
| 1607-03           | 5400        |                               |       |                    | 0.311               |              |        |
| 1607-05           | 3410        |                               |       |                    | 1.036               |              |        |
| CaCO <sub>3</sub> | 1020        |                               |       |                    | 11.94               | CCS          | 99.5   |

Anderson

DATE

4-27-95

REVIEWED

js

DATE

4/28/95

PAGE

1 OF

2

7/27/93

|            |                  |              |            |
|------------|------------------|--------------|------------|
| ANALYSIS   | CARBONATE CARBON | METHOD       | SOP COU-02 |
| ANALYZER # | 6                | COULOMETER # | 3          |
| BALANCE #  | 10               |              |            |

|  |                  |                     |   |                  |                   |
|--|------------------|---------------------|---|------------------|-------------------|
| CALCIUM CARBONATE<br>(STD # 333) CaCO <sub>3</sub> | BOTTLE #<br>4712 | % C THEORY = 12.00% | SODIUM CARBONATE<br>Na <sub>2</sub> CO <sub>3</sub> | BOTTLE #<br>2730 | % C THEORY = 11.3 |
|--|------------------|---------------------|---|------------------|-------------------|

| SAMPLE NO.          | TARE WT. GRAMS | TARE + SAMPLE WT. | SAMPLE WT. GRAMS | NOTES                             | COUNTS $\mu$ GRAMS | LESS BLANK 8 | % CARBON AS CARBONATE CARBON | QC  | % RECOVERY |
|---------------------|----------------|-------------------|------------------|-----------------------------------|--------------------|--------------|------------------------------|-----|------------|
| BL                  |                |                   |                  |                                   | 6.8                |              |                              | IB  |            |
| BL                  |                |                   |                  |                                   | 8.6                |              |                              | MB  |            |
| BL                  |                |                   |                  |                                   | 8.5                |              |                              | MB  |            |
| N/2 CO <sub>2</sub> | 0.850016       | 0.856541          | 0.006525         |                                   | 748.0<br>738.6     | 740.0        | 11.34                        | ICS | 100.09     |
| CaCO <sub>3</sub>   | 0.863424       | 0.868667          | 0.005243         |                                   | 633.6              | 625.6        | 11.95                        | LCS | 99.6       |
| 160701              | 0.941366       | 1.149121          | 0.207755         | (NH) 3 Spurts Acid 2 Spurts Clock | 8.0                | 0            | 0                            |     | 0          |
| 160701              | 0.898693       | 1.278806          | 0.380113         | (NH) 11.1 Spurts Acid             | 3.1                | 20000051     |                              |     | ~0         |
| 160702              | 0.875199       |                   |                  | (NH) Dropper Bmt                  |                    |              |                              |     |            |
| 160702              | 0.912632       | 1.070765          | 0.157933         | (NH)                              | 8.9                | .9           | 0.0000056                    |     | ~0         |
| 160703              | 0.886964       | 1.007451          | 0.120487         | (NH)                              | 7.9                | 0            | 0                            |     | ~0         |
| 160704              | 0.876686       | 1.114147          | 0.237461         | (NH)                              | 9.1                | 1.1          | 0.0000046                    |     | ~0         |
| 160705              | 0.838101       | 0.963910          | 0.125809         | (NH)                              | 7.8                | 0            | 0                            |     | ~0         |
| CaCO <sub>3</sub>   | 0.847686       | 0.853324          | 0.005638         |                                   | 690.9              | 682.9        | 12.11                        | CCS | 100.9      |



## Evergreen Analytical Sample Log Sheet

Project # 95-1217Date(s) Sampled: 04/12,13/95 COCDate Due: 4/19-UST,4/28-OTHERSDate Received: 04/14/95 1130Holding Time(s): 04/26,27-USTClient Project I.D. 722450.26020/SEYMORE JOHNSON AFB Rush STANDARDClient: Parsons Engineering Science, Inc.Shipping Charges \$5.00Address: 1700 BROADWAY ,SUITE 900E.A. Cooler # CLIENTDENVER, CO. 80290Airbill # UPSContact: TODD WIEDEMEIERCustody Seal Intact? N/A

Client P.O. \_\_\_\_\_

Cooler \_\_\_\_\_ Bottles \_\_\_\_\_

COC Present

Y

Sample Tags Present?

Y

Phone #831-8100 Fax 831-8208Sample Tags Listed? YSample(s) Sealed? Y

Special Invoicing/Billing \_\_\_\_\_

Special Instructions \*SAMPLES NEED BTEX SPLIT. BTEX-TMB, TMB CHLOROBENZENES.

| Lab ID #  | Client ID#         | Analysis                           | Mtx | Btl  | Loc    |
|-----------|--------------------|------------------------------------|-----|------|--------|
| X05753    | MW-6 15-16'        | * BTEX,TVH,TEH,ALK. (%MOISTURE)    | S   | TUBE | A7     |
| X05757    | MW-10 10-11'       | *TOC,BTEX,TVH,TEH,ALK. (%MOISTURE) | S   | TUBE | A7/OUT |
| X05758    | MW-10 11-12'       | MS/MSD BTEX, (%MOISTURE)           | S   | TUBE | A7     |
| X05754    | MW-6 16-16.5       | TOC, (%MOISTURE)                   | S   | TUBE | A7/OUT |
| X05755    | MW-8 11-12'        | * BTEX,TVH,TEH, (%MOISTURE)        | S   | TUBE | A7     |
| X05756    | MW-9 15-16'        | * BTEX,TVH,TEH, (%MOISTURE)        | S   | TUBE | A7     |
| X05759A/B | MW-11 11.5-13.5    | TOC,BTEX,TVH, (%MOISTURE)          | S   | 2WM  | #2/OUT |
| X05760A/B | SS-1 11.5-13.5     | BTEX                               | S   | 2WM  | #2     |
| X05760E/F | SS-1 11.5-13.5 DUP | BTEX                               | S   | 2WM  | #2     |
| X05762A/B | SS-1 16'-18'       | BTEX                               | S   | 2WM  | #2     |
| X05763A/B | SS-2 11.5-13.5     | BTEX                               | S   | 2WM  | #2     |
| X05764A/B | SS-3 9-11          | BTEX                               | S   | 2WM  | #2     |
| X05764E/F | SS-3 9-11 DUP      | BTEX                               | S   | 2WM  | #2     |
| X05760C   | SS-1 11.5-13.5     | TVH                                | S   | 2WM  | #2     |
| X05760G   | SS-1 11.5-13.5 DUP | TVH                                | S   | 2WM  | #2     |
| X05762C   | SS-1 16'-18'       | TVH                                | S   | 2WM  | #2     |

R=Sample to be returned

Route GC/MS \_\_\_\_\_ GC 3 Metals \_\_\_\_\_ Wet Chem 1 SxPrep 1 Acctg 1SxRec C QA/QC C Sales C File Orig4/18/95

| Lab<br>ID # | Client<br>ID#       | Analysis         | Mtx | Btl | Loc |
|-------------|---------------------|------------------|-----|-----|-----|
| X05763C     | SS-2 11.5-13.5      | TVH              | S   | 2WM | #2  |
| X05764C     | SS-3 9-11           | TVH              | S   | 2WM | #2  |
| X05764G     | SS-3 9-11 DUP       | TVH              | S   | 2WM | #2  |
| X05760D     | SS-1 11.5-13.5      | TEH, (%MOISTURE) | S   | 2WM | A7  |
| X05760H     | SS-1 11.5-13.5 DUP  | TEH, (%MOISTURE) | S   | 2WM | A7  |
| X05762D     | SS-1 16'-18'        | TEH, (%MOISTURE) | S   | 2WM | A7  |
| X05763D     | SS-2 11.5-13.5      | TEH, (%MOISTURE) | S   | 2WM | A7  |
| X05764D     | SS-3 9-11           | TEH, (%MOISTURE) | S   | 2WM | A7  |
| X05764H     | SS-3 9-11 DUP       | TEH, (%MOISTURE) | S   | 2WM | A7  |
| X05759      | MW-11 11 1/2-13 1/2 | TEH, (%MOISTURE) | S   | 2WM | A7  |

Page 2 of 2 Pages

Project # 95-1217

R=Sample to be returned





Date & Time Rec'd: 4/14/95 1150Shipped Via: UPSClient: PARSONS

(Airbill # if applicable)

Client Project ID(s): 722450. 26020EAL Project #(s): 95-1217EAL Cooler(s): Y(N)Cooler# clientIce packs (Y) N Y N Y N Y N Y NTemperature °C 4<sup>6</sup>

Y

N

N/A

1. Custody seal(s) present:  
Seals on cooler intact  
Seals on bottle intact

taped

2. Chain of Custody present:

3. Containers broken or leaking:  
(Comment on COC if Y)

4. Containers labeled:

5. COC agrees w/ bottles received:  
(Comment on COC if N)

6. COC agrees w/ labels:  
(Comment on COC if N)

7. Headspace in VOA vials-waters only  
(comment on COC if Y)

8. VOA samples preserved:

9. pH measured on metals, cyanide or phenolics\*:

List discrepancies \_\_\_\_\_

\*Non-EAL provided containers only, water samples only.

10. Metal samples present:

Total \_\_\_\_\_, Dissolved \_\_\_\_\_

D or PD to be filtered:

T, TR, D, PD to be Preserved:

11. Short holding times:

Specify parameters \_\_\_\_\_

12. Multi-phase sample(s) present:

13. COC signed w/ date/time:

Comments: Chain of custody and labels on sample tubes do not agree. Samples in tubes are not homogeneous. 4/14/95

(Additional comments on back)

Custodian Signature/Date: Lee (ORRICK) 4/14/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Method Blank Report

Method Blank Number : MB042095  
Date Extracted/Prepared : 4/20/95  
Date Analyzed : 4/20/95  
% Moisture : NA

Client Project No. : 722450.26020/Seymore  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX1042009

| Compound Name              | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L |
|----------------------------|-----------------------------------|---------------------------------|------------|
| Benzene                    | 71-43-2                           | U                               | 0.4        |
| Toluene                    | 108-88-3                          | U                               | 0.4        |
| Chlorobenzene              | 108-90-7                          | U                               | 0.4        |
| Ethyl Benzene              | 100-41-4                          | U                               | 0.4        |
| T Xylenes<br>(m, p & o)    | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4        |
| 1,3,5-Trimethylbenzene     | 108-67-8                          | U                               | 0.4        |
| 1,2,4-Trimethylbenzene     | 95-63-6                           | U                               | 0.4        |
| 1,2,3-Trimethylbenzene     | 526-73-8                          | U                               | 0.4        |
| 1,2,3,4-Tetramethylbenzene | 488-23-3                          | U                               | 0.4        |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 101% 70%-130% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

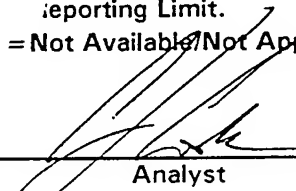
U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

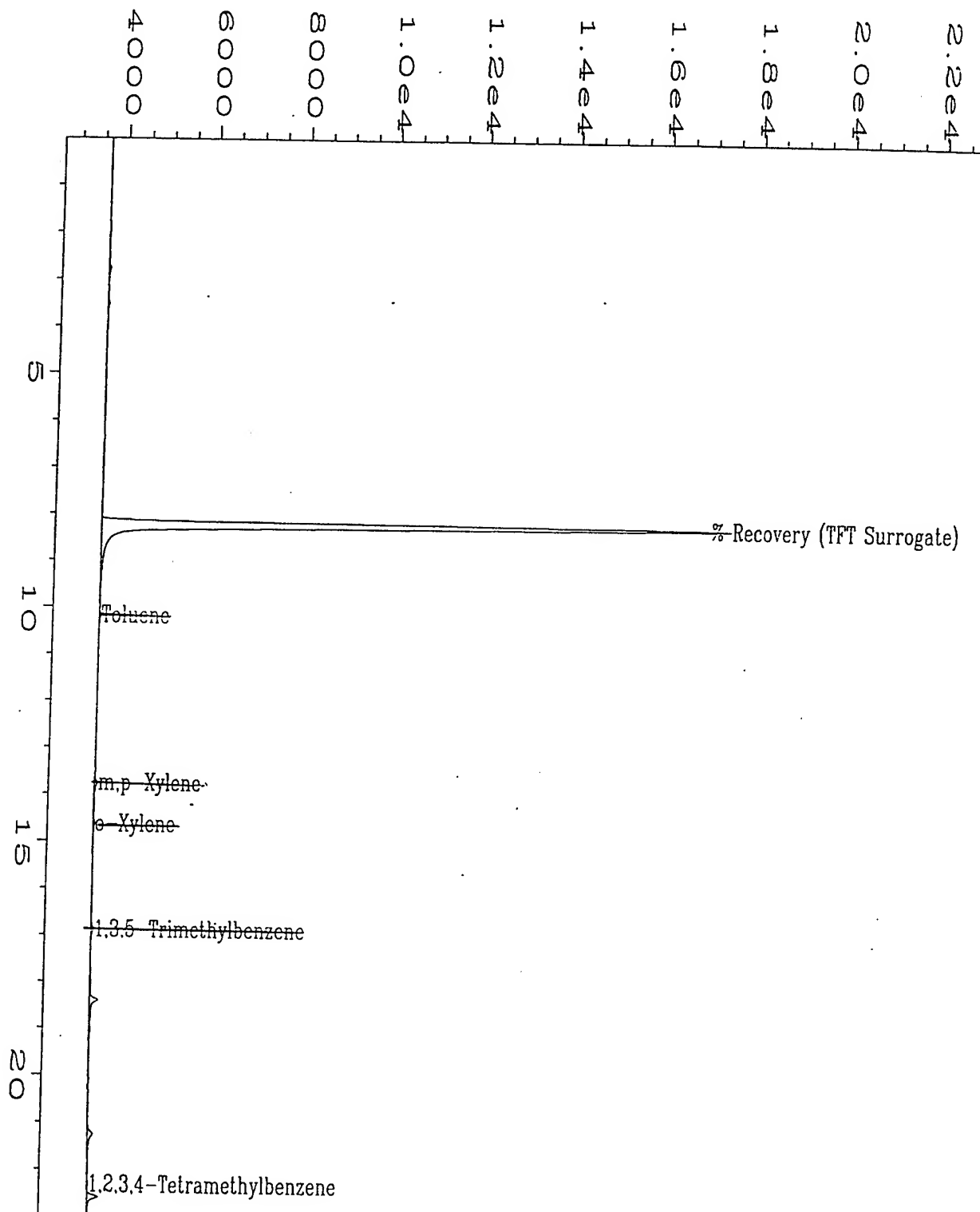
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                   |                                       |                   |                |
|-------------------|---------------------------------------|-------------------|----------------|
| File Name         | : C:\HPCHEM\1\DATA\BX10420\009F0701.D | Page Number       | : 1            |
| Operator          | : SW Tyson                            | Vial Number       | : 9            |
| Instrument        | : BTEX1                               | Injection Number  | : 1            |
| Sample Name       | : MB042095                            | Sequence Line     | : 7            |
| Bar Code:         |                                       | Instrument Method | : BX10420.MTH  |
| Acquired on       | : 20 Apr 95 02:35 PM                  | Analysis Method   | : BX10420B.MTH |
| Report Created on | : 21 Apr 95 12:38 PM                  | Sample Amount     | : 0            |
| Recalibrated on   | : 21 APR 95 12:15 PM                  | ISTD Amount       | :              |
| Multiplier        | : 1                                   |                   |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Method Blank Report

Method Blank Number : MB042295  
Date Extracted/Prepared : 4/22/95  
Date Analyzed : 4/22/95  
% Moisture : NA

Client Project No. : 722450.26020/Seymore  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042211

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Xylenes<br>(m, p & o)   | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 0.4                             | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 101%                            | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

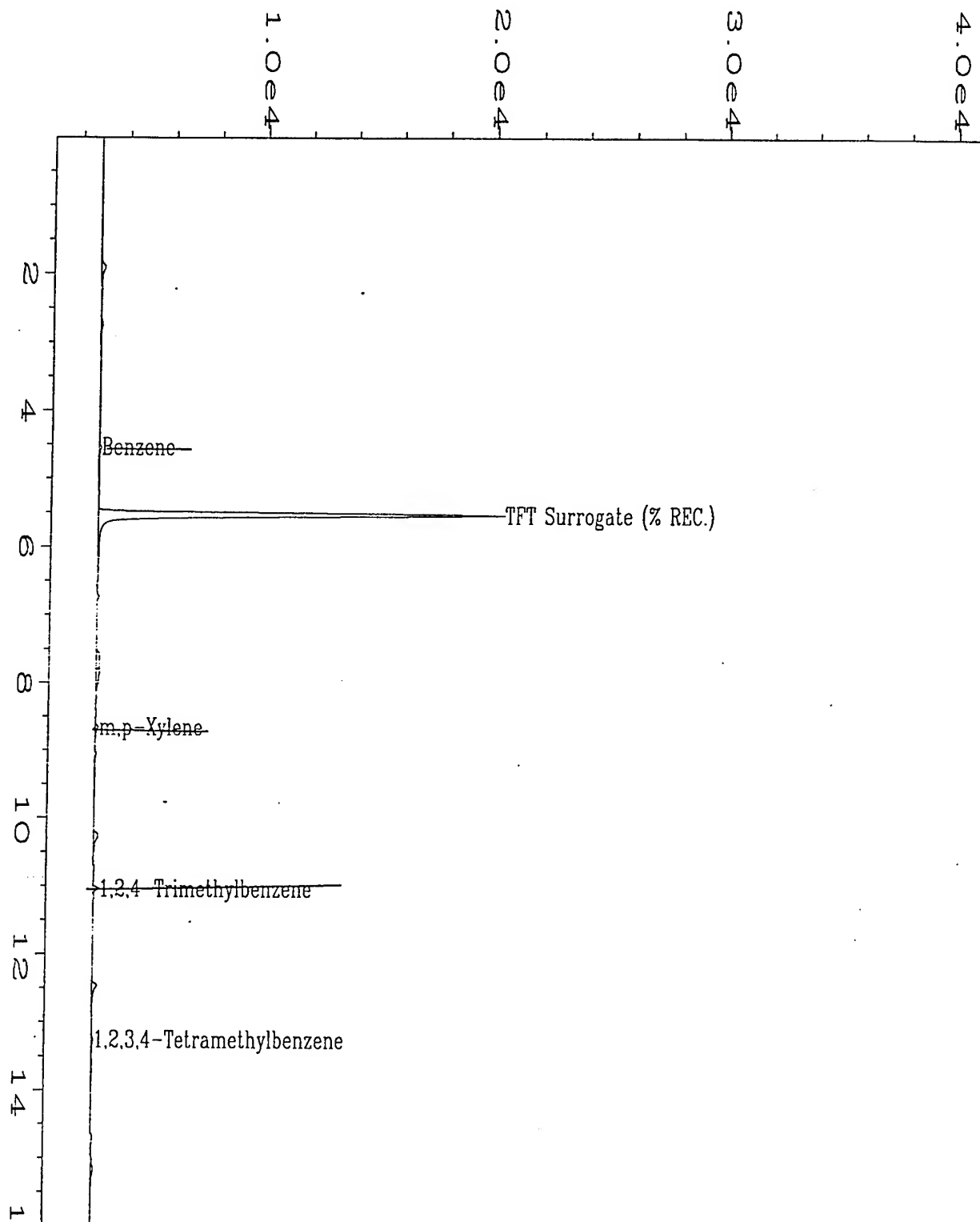
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

R = Reporting Limit.

NA = Not Available/Not Applicable.

Analyst

Approved



|                   |                                       |                   |               |
|-------------------|---------------------------------------|-------------------|---------------|
| ata File Name     | : C:\HPCHEM\2\DATA\BX20422\011R1001.D | Page Number       | : 1           |
| perator           | : T.Lockwood                          | Vial Number       | : 11          |
| nstrument         | : BTEX2                               | Injection Number  | : 1           |
| ample Name        | : MB042295                            | Sequence Line     | : 10          |
| u me Bar Code:    |                                       | Instrument Method | : BX20422.MTH |
| cquired on        | : 22 Apr 95 03:54 PM                  | Analysis Method   | : BX20422.MTH |
| eport Created on: | 24 Apr 95 06:40 PM                    | Sample Amount     | : 0           |
| ast Recalib on    | : 24 APR 95 06:19 PM                  | ISTD Amount       | :             |
| ultiplier         | : 1                                   |                   |               |

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Method 8020 Data Report  
Method Blank Report

Method Blank Number : MB042395  
Date Extracted/Prepared : 4/23/95  
Date Analyzed : 4/23/95  
% Moisture : NA

Client Project No. : 722450.26020/Seymore  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042310

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| T Xylenes<br>(m, p & o)   | 108-38-3, 106-42-3<br>and 95-47-6 | 0.4                          | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 0.5                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 0.8                          | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 96%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

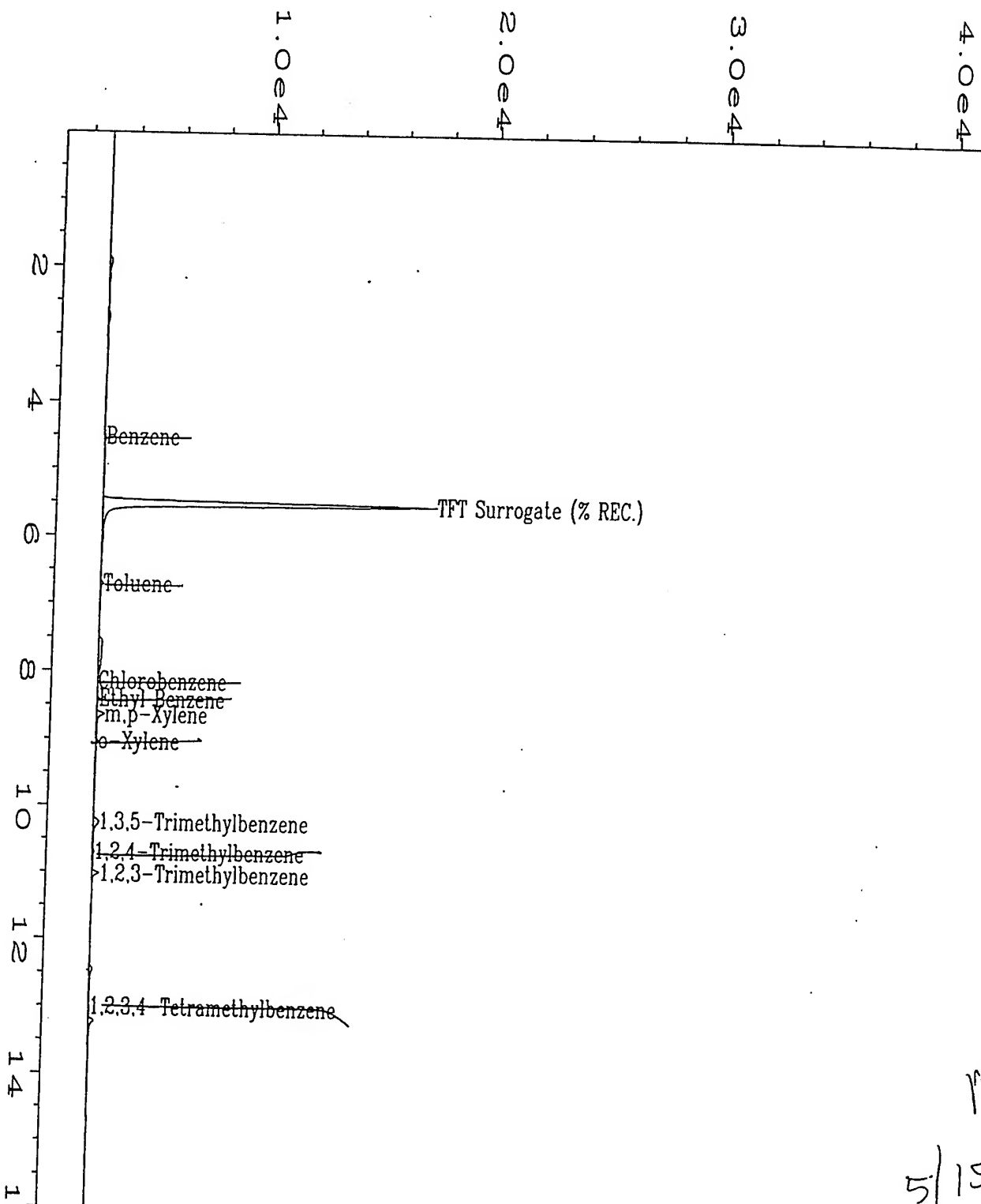
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

Analyst

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5/15/95

Data File Name : D:\2\DATA\BX20423\010R0901.D  
 Operator : T.Lockwood  
 Instrument : BTEX2  
 Sample Name : MB042395  
 Sample Bar Code:  
 Acquired on : 23 Apr 95 02:14 PM  
 Report Created on: 25 Apr 95 04:32 PM  
 Last Recalib on : 25 Apr 95 04:27 PM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 10  
 Injection Number : 1  
 Sequence Line : 9  
 Instrument Method: BX20423.MTH  
 Analysis Method : BX20423.MTH  
 Sample Amount : 0  
 ISTD Amount :

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Method 8020 Data Report  
Method Blank Report

|                         |             |                    |                                    |
|-------------------------|-------------|--------------------|------------------------------------|
| Method Blank Number     | : MEB042395 | Client Project No. | : 722450.26020/Seymore Johnson AFB |
| Date Extracted/Prepared | : 4/23/95   | Lab Project No.    | : 95-1217                          |
| Date Analyzed           | : 4/23/95   | Dilution Factor    | : 125.00                           |
| % Moisture              | : NA        | Method             | : 602/8020                         |
|                         |             | Matrix             | : Water/MeOH                       |
|                         |             | Lab File No.       | : BX2042311                        |

| Compound Name              | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L |
|----------------------------|-----------------------------------|------------------------------|------------|
| Benzene                    | 71-43-2                           | U                            | 500        |
| Toluene                    | 108-88-3                          | U                            | 500        |
| Chlorobenzene              | 108-90-7                          | U                            | 500        |
| Ethyl Benzene              | 100-41-4                          | U                            | 500        |
| T Xylenes<br>(m, p & o)    | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 500        |
| 1,3,5-Trimethylbenzene     | 108-67-8                          | U                            | 500        |
| 1,2,4-Trimethylbenzene     | 95-63-6                           | U                            | 500        |
| 1,2,3-Trimethylbenzene     | 526-73-8                          | U                            | 500        |
| 1,2,3,4-Tetramethylbenzene | 488-23-3                          | U                            | 500        |

|   |      |                      |
|---|------|----------------------|
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): | 105% | 70%-130% (QC limits) |
|---|------|----------------------|

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

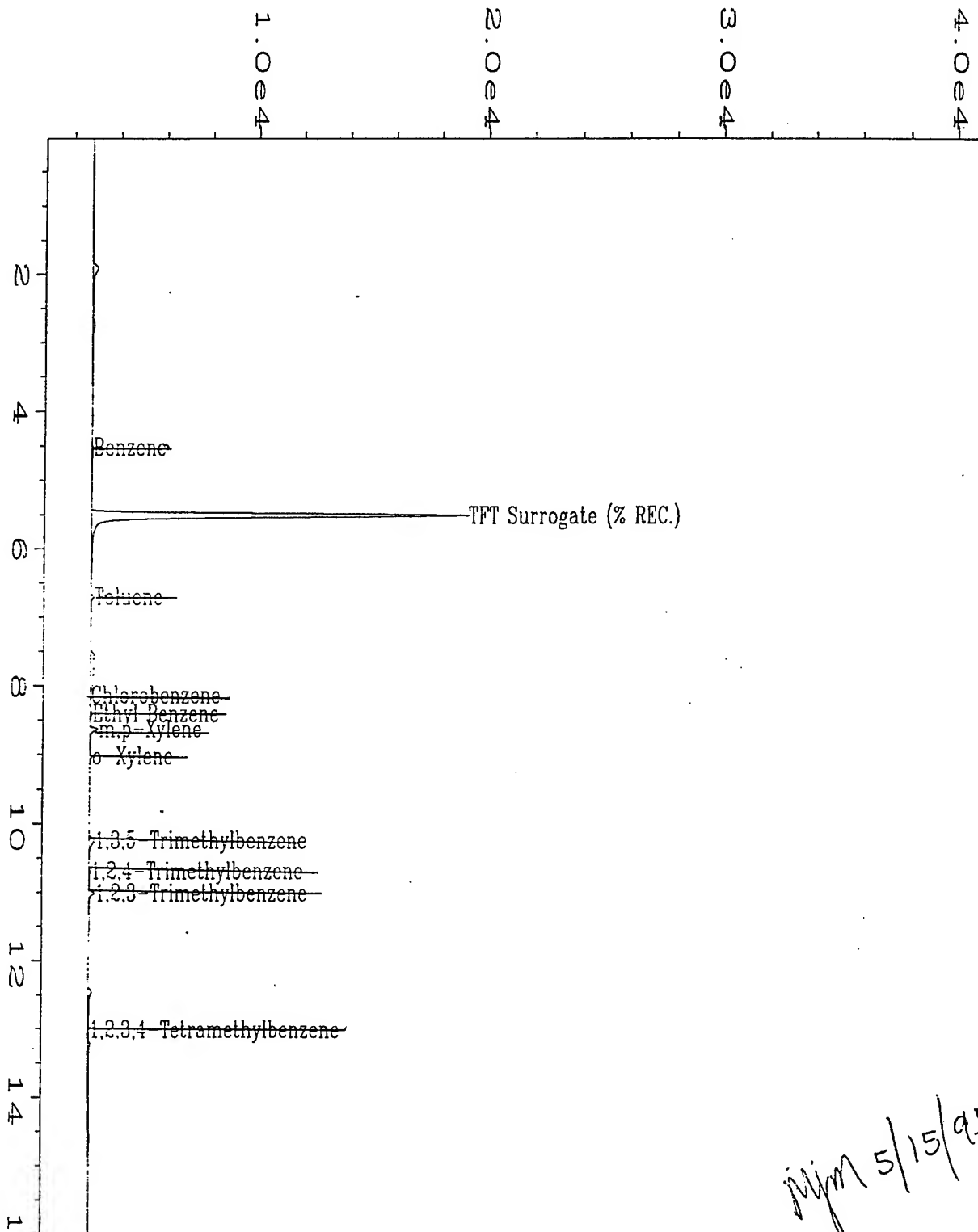
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



*mjm 5/15/95*

|                   |                                       |                    |               |
|-------------------|---------------------------------------|--------------------|---------------|
| ata File Name     | : C:\HPCHEM\2\DATA\BX20423\011R0901.D | Page Number        | : 1           |
| perator           | : T.Lockwood                          | Vial Number        | : 11          |
| nstrument         | : BTEX2                               | Injection Number   | : 1           |
| ar File Name      | : MEB042395                           | Sequence Line      | : 9           |
| u File Bar Code:  |                                       | Instrument Method: | BX20423.MTH   |
| cquired on        | : 23 Apr 95 02:50 PM                  | Analysis Method    | : BX20423.MTH |
| eport Created on: | 25 Apr 95 04:48 PM                    | Sample Amount      | : 0           |
| ast Recalib on    | : 25 APR 95 04:27 PM                  | ISTD Amount        | :             |
| ultiplier         | : 125                                 |                    |               |

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Method 8020 Data Report  
Method Blank Report

|                         |            |                    |                                    |
|-------------------------|------------|--------------------|------------------------------------|
| Method Blank Number     | : MB042595 | Client Project No. | : 722450.26020/Seymore Johnson AFB |
| Date Extracted/Prepared | : 4/25/95  | Lab Project No.    | : 95-1217                          |
| Date Analyzed           | : 4/25/95  | Dilution Factor    | : 1.00                             |
| % Moisture              | : NA       | Method             | : 602/8020                         |
|                         |            | Matrix             | : Water                            |
|                         |            | Lab File No.       | : BX2042511                        |

| Compound Name   | Cas Number                     | Sample Concentration ug/L | RL ug/L              |
|---|--------------------------------|---------------------------|----------------------|
| Benzene   | 71-43-2                        | U                         | 0.4                  |
| Toluene   | 108-88-3                       | U                         | 0.4                  |
| Chlorobenzene   | 108-90-7                       | U                         | 0.4                  |
| Ethyl Benzene   | 100-41-4                       | U                         | 0.4                  |
| m, p & o Xylenes  | 108-38-3, 106-42-3 and 95-47-6 | 0.6                       | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                       | U                         | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                        | U                         | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                       | 0.4                       | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                       | U                         | 1.0                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                | 93%                       | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

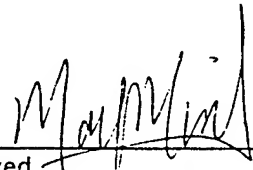
B = Compound also found in the blank.

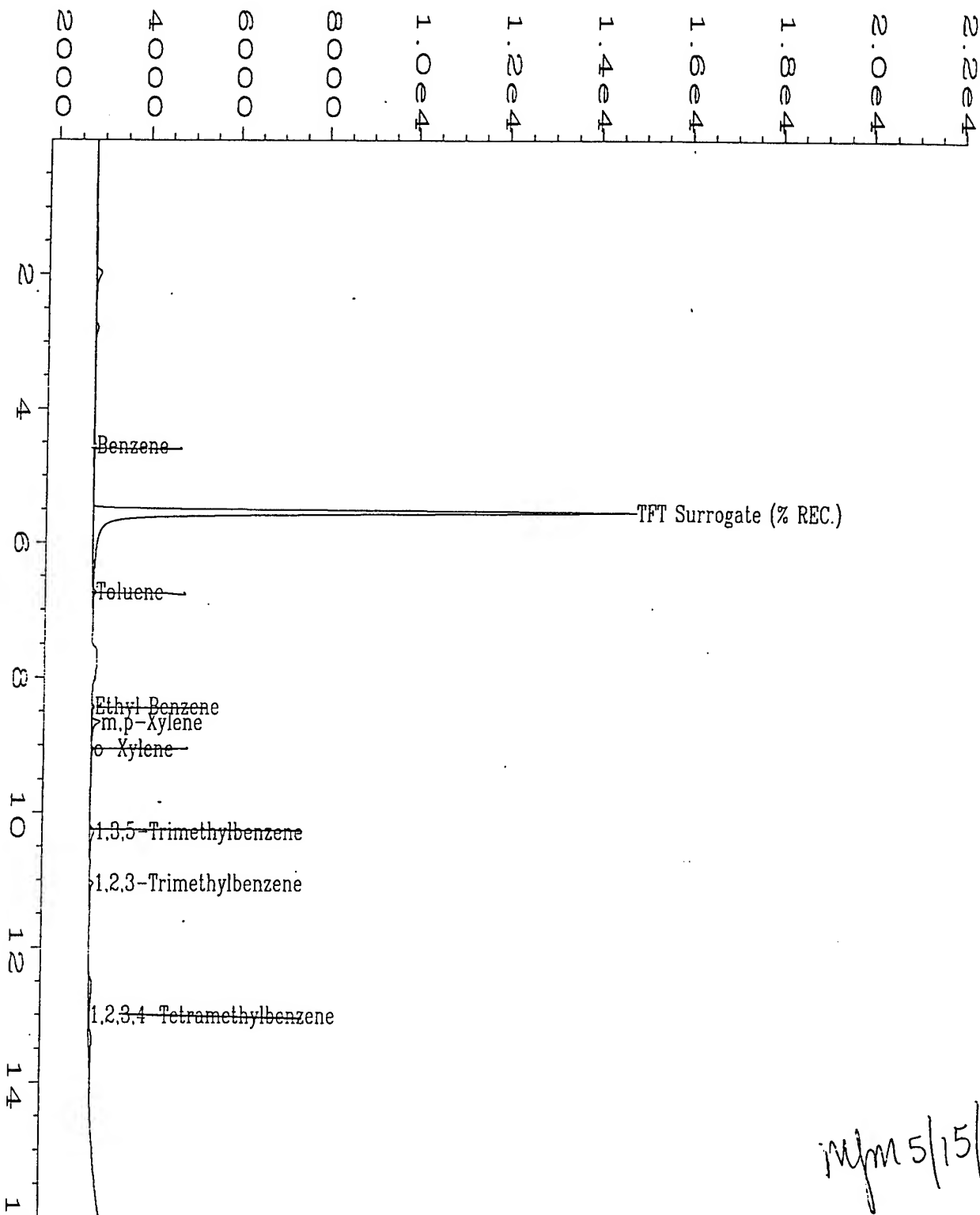
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

F = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
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mjm 5/15/95

|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20425\011R0101.D | Page Number       | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number       | : 11          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : MB042595                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20425.MTH |
| Acquired on        | : 25 Apr 95 03:02 PM                  | Analysis Method   | : BX20425.MTH |
| Report Created on  | : 12 May 95 06:13 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 26 APR 95 09:49 AM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

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Method 8020 Data Report  
Method Blank Report

Method Blank Number : MEB042595  
Date Extracted/Prepared : 4/26/95  
Date Analyzed : 4/26/95  
% Moisture : NA

Client Project No. : 722450.26020/Seymore  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 125.00  
Method : 602/8020  
Matrix : Water/MeOH  
Lab File No. : BX2042621

| Compound Name              | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L |
|----------------------------|-----------------------------------|------------------------------|------------|
| Benzene                    | 71-43-2                           | U                            | 500        |
| Toluene                    | 108-88-3                          | U                            | 500        |
| Chlorobenzene              | 108-90-7                          | U                            | 500        |
| Ethyl Benzene              | 100-41-4                          | U                            | 500        |
| Xylenes<br>(m, p & o)      | 108-38-3, 106-42-3<br>and 95-47-6 | 53 J                         | 500        |
| 1,3,5-Trimethylbenzene     | 108-67-8                          | U                            | 500        |
| 1,2,4-Trimethylbenzene     | 95-63-6                           | U                            | 500        |
| 1,2,3-Trimethylbenzene     | 526-73-8                          | 120 J                        | 500        |
| 1,2,3,4-Tetramethylbenzene | 488-23-3                          | U                            | 500        |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 93% 70%-130% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.


U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

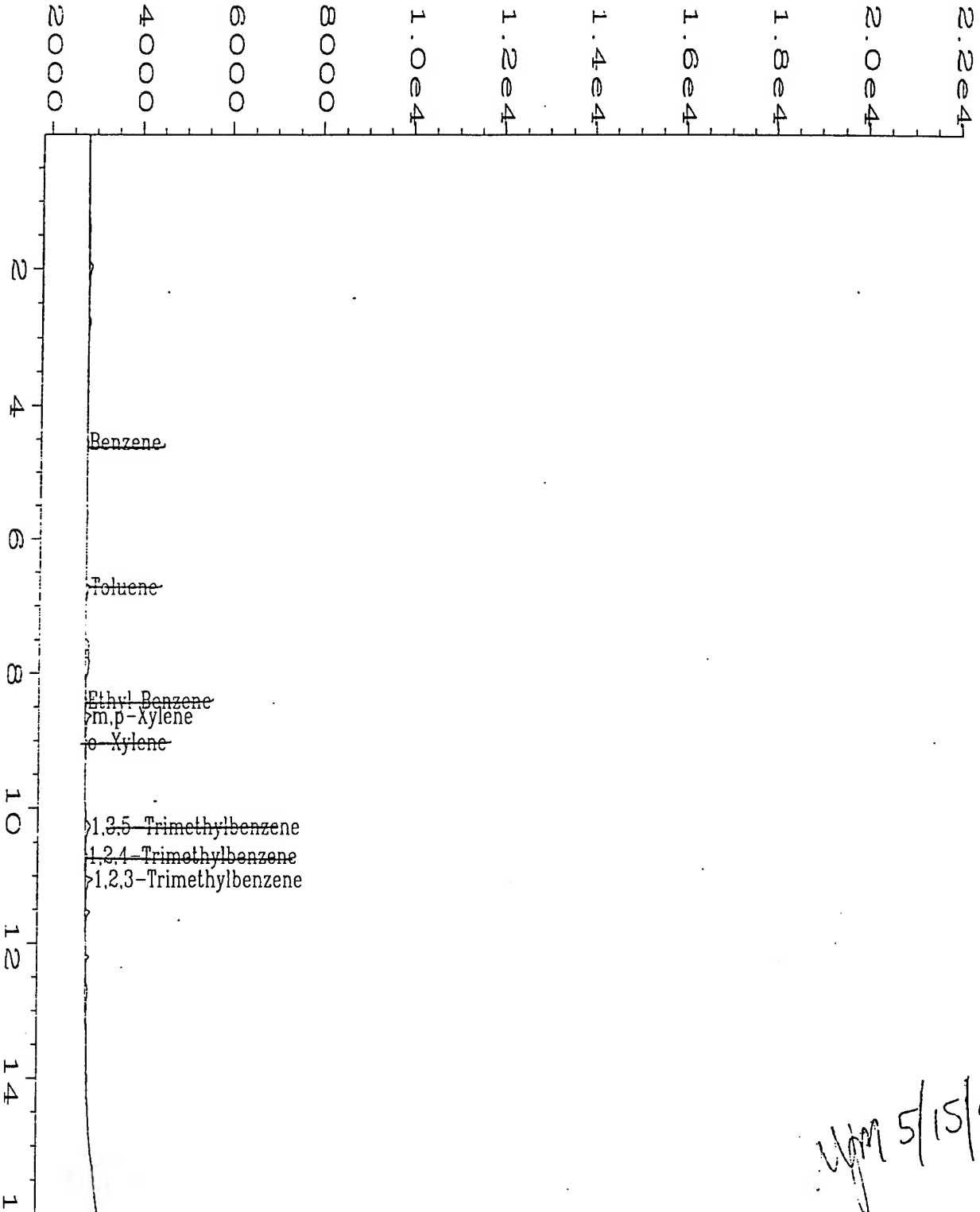
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

F = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



*Wm 5/15/95*

|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20425\018R0101.D | Page Number       | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number       | : 18          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : MEB042595                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20425.MTH |
| Acquired on        | : 25 Apr 95 07:34 PM                  | Analysis Method   | : BX20425.MTH |
| Report Created on: | 12 May 95 06:16 PM                    | Sample Amount     | : 0           |
| Last Recalib on    | : 26 APR 95 09:49 AM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

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Method 8020 Data Report  
Method Blank Report

Method Blank Number : MB042695  
Date Extracted/Prepared : 4/26/95  
Date Analyzed : 4/26/95  
% Moisture : NA

Client Project No. : 722450.26020/Seymore  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042611

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 0.7                             | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 0.6                             | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 0.9                             | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 106%                            | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

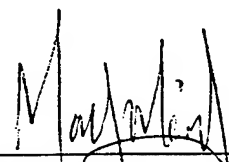
B = Compound also found in the blank.

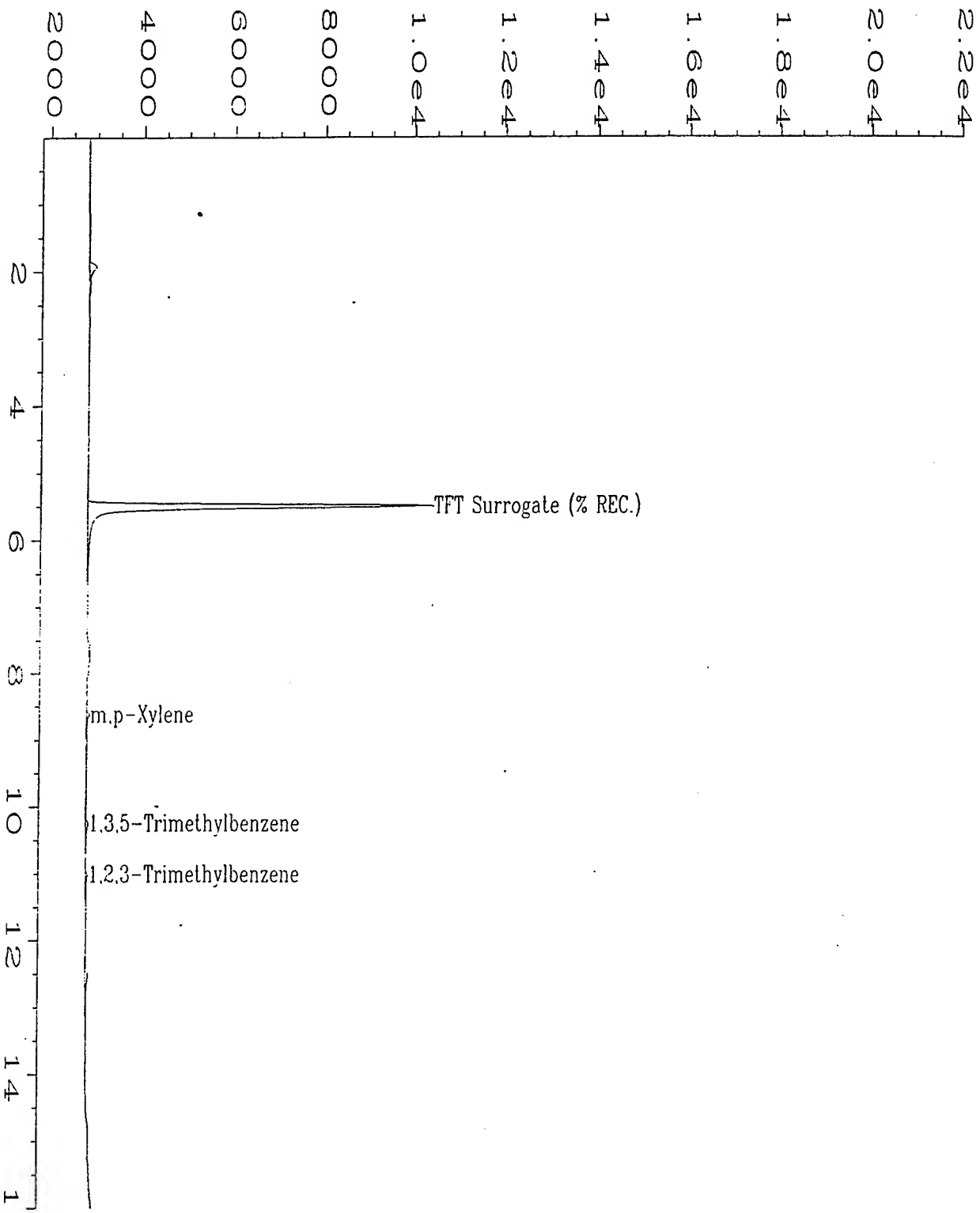
J = Indicates an estimated value when the compound is detected, but is below the Reporting  
Limit (RL).

R = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



Data File Name : D:\2\DATA\BX20426\011R1001.D  
 Operator : S.W. Tyson  
 Instrument. : BTEX2  
 Sample Name : MB042695  
 Run Time Bar Code:  
 Acquired on : 26 Apr 95 03:19 PM  
 Report Created on: 15 May 95 08:26 PM  
 Last Recalib on : 26 APR 95 02:33 PM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 11  
 Injection Number : 1  
 Sequence Line : 10  
 Instrument Method: BX20426.MTH  
 Analysis Method : BX20426.MTH  
 Sample Amount : 0  
 ISTD Amount :

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Method 8020 Data Report

Client Sample Number : MW-6 15-16'  
Lab Sample Number : X05753  
Date Sampled : 4/12/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/22/95  
Date Analyzed : 4/22/95  
% Moisture : 25.33%

Client Project No. : 722450.26020/S [redacted] Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX2042214  
Method Blank No. : MB042295

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 5.4                  |
| Toluene   | 108-88-3                          | U                                 | 5.4                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.4                  |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                                 | 5.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 0.5 J                             | 5.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                                 | 5.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                                 | 5.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 101%                              | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

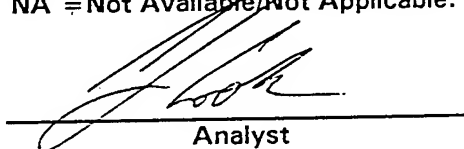
U = Compound analyzed for, but not detected.

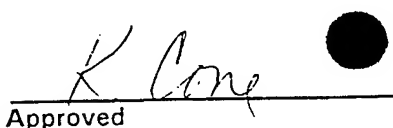
B = Compound also found in the blank.

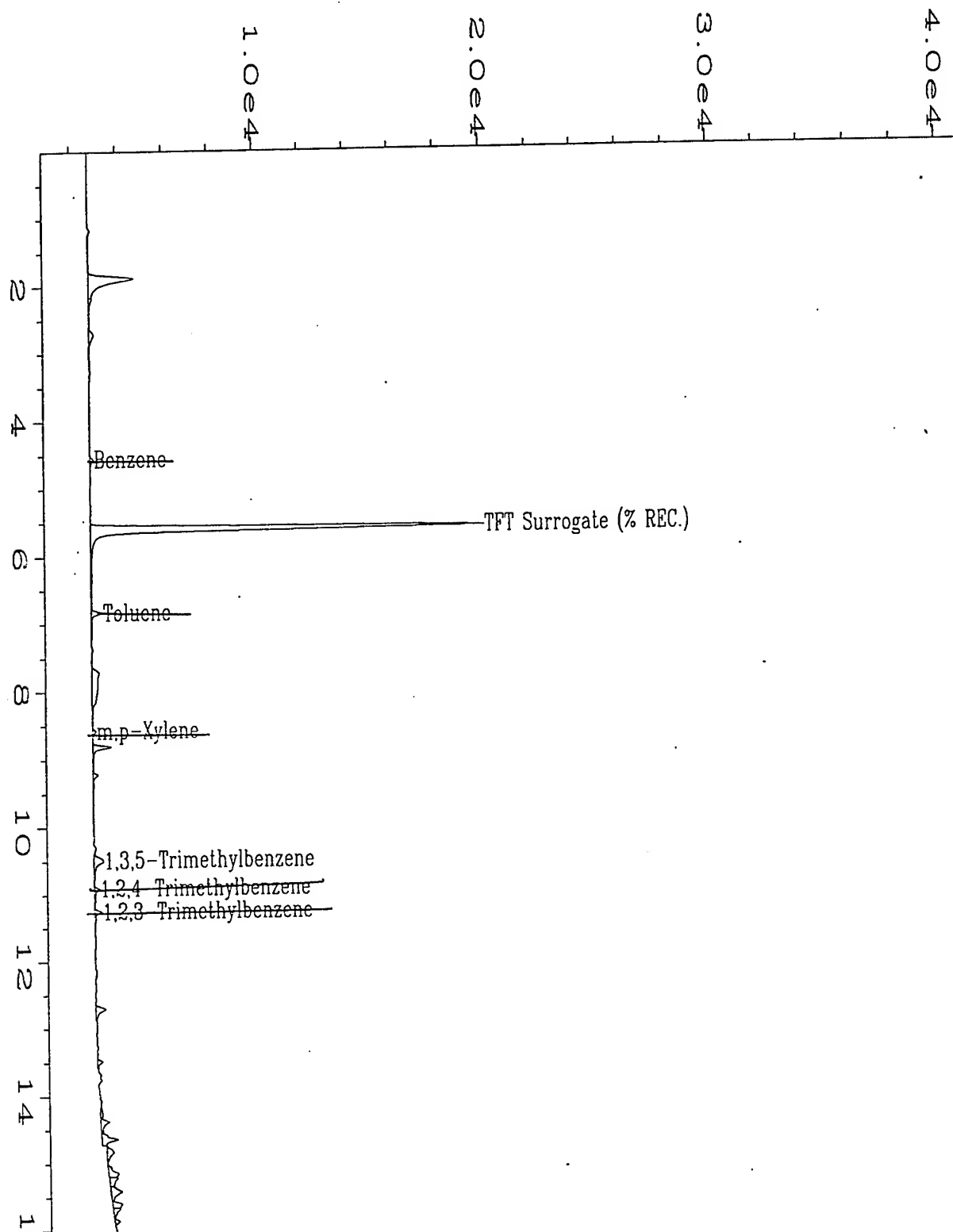
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\014R1001.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 14          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05753;1;5                          | Sequence Line      | : 10          |
| Run Time Bar Code: |                                       | Instrument Method: | BX20422.MTH   |
| Acquired on        | : 22 Apr 95 06:18 PM                  | Analysis Method    | : BX20422.MTH |
| Report Created on: | 24 Apr 95 06:42 PM                    | Sample Amount      | : 0           |
| 1st Recalib on     | : 24 APR 95 06:19 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-1217; MW-6 15-16';5 GRAMS SOIL   |                    |               |

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Method 8020 Data Report

Client Sample Number : MW-6 15-16'  
Lab Sample Number : X05753DUP  
Date Sampled : 4/12/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/22/95  
Date Analyzed : 4/22/95  
% Moisture : 25.33%

Client Project No. : 722450.26020/Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX2042223  
Method Blank No. : MB042295

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 5.4                  |
| Toluene   | 108-88-3                          | U                                 | 5.4                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.4                  |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                                 | 5.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                                 | 5.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                                 | 5.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                                 | 5.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 91%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

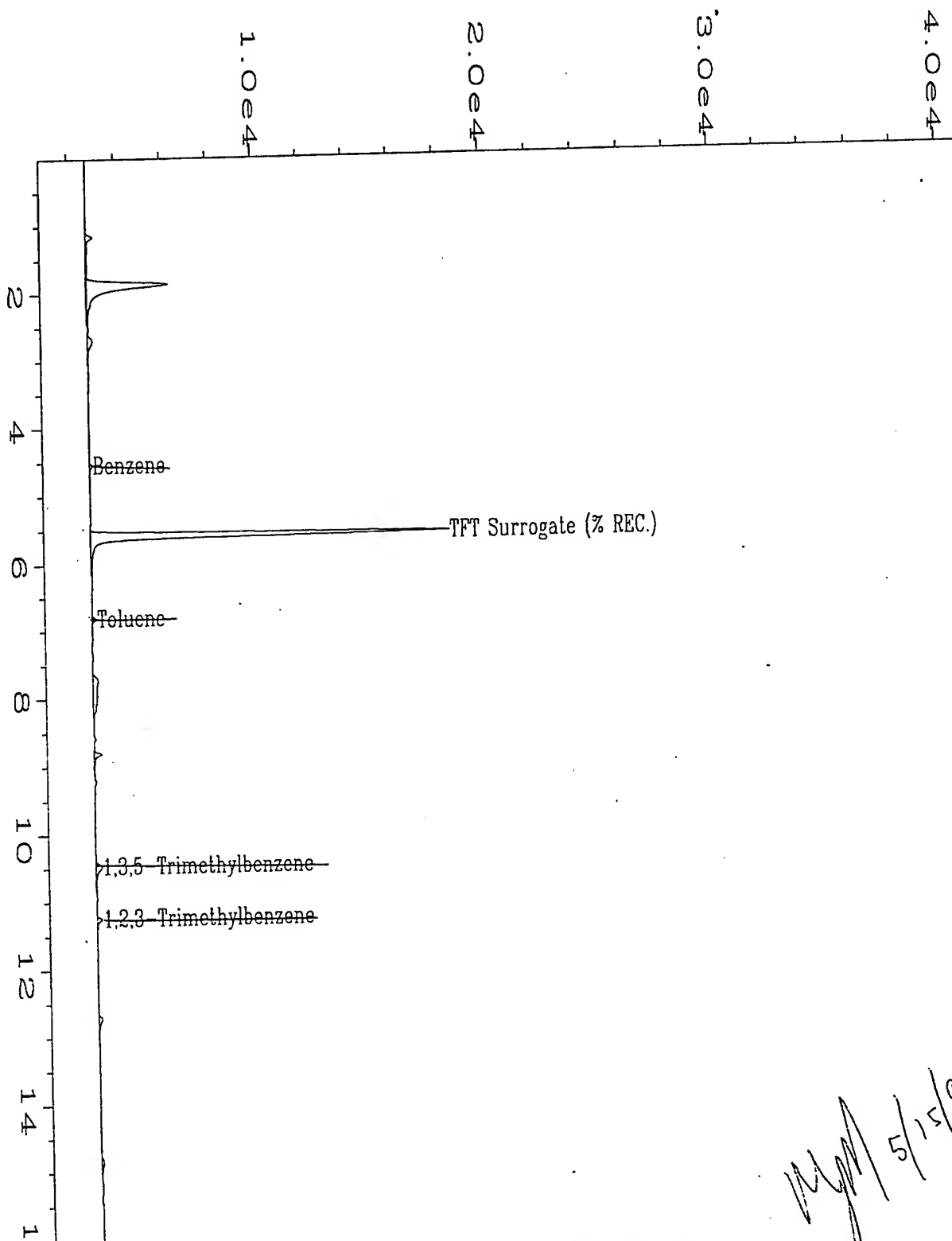
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

Analyst

Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\023R1001.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 23          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05753DUP;1;5                       | Sequence Line      | : 10          |
| Run Time Bar Code: |                                       | Instrument Method: | BX20422.MTH   |
| Acquired on        | : 22 Apr 95 11:43 PM                  | Analysis Method    | : BX20422.MTH |
| Report Created on: | 24 Apr 95 06:46 PM                    | Sample Amount      | : 0           |
| 1st Recalib on     | : 24 APR 95 06:19 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-1217; MW-6 15-16'; 5 GRAMS SOIL  |                    |               |

Method 8020 Data Report

|                         |               |                    |                            |
|-------------------------|---------------|--------------------|----------------------------|
| Client Sample Number    | : MW-8 11-12' | Client Project No. | : 722450.26020/Johnson AFB |
| Lab Sample Number       | : X05755      | Lab Project No.    | : 95-1217                  |
| Date Sampled            | : 4/12/95     | Dilution Factor    | : 1.00                     |
| Date Received           | : 4/14/95     | Method             | : 8020                     |
| Date Extracted/Prepared | : 4/22/95     | Matrix             | : Soil                     |
| Date Analyzed           | : 4/22/95     | Lab File No.       | : BX2042219                |
| % Moisture              | : 20.45%      | Method Blank No.   | : MB042295                 |

| Compound Name               | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg |
|-----------------------------|-----------------------------------|-----------------------------------|--------------|
| Benzene                     | 71-43-2                           | U                                 | 5.0          |
| Toluene                     | 108-88-3                          | U                                 | 5.0          |
| Chlorobenzene               | 108-90-7                          | U                                 | 5.0          |
| Ethyl Benzene               | 100-41-4                          | U                                 | 5.0          |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | 0.7 J                             | 5.0          |
| 1,3,5-Trimethylbenzene      | 108-67-8                          | U                                 | 5.0          |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | U                                 | 5.0          |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | U                                 | 5.0          |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | U                                 | 5.0          |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 91% 50%-150% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

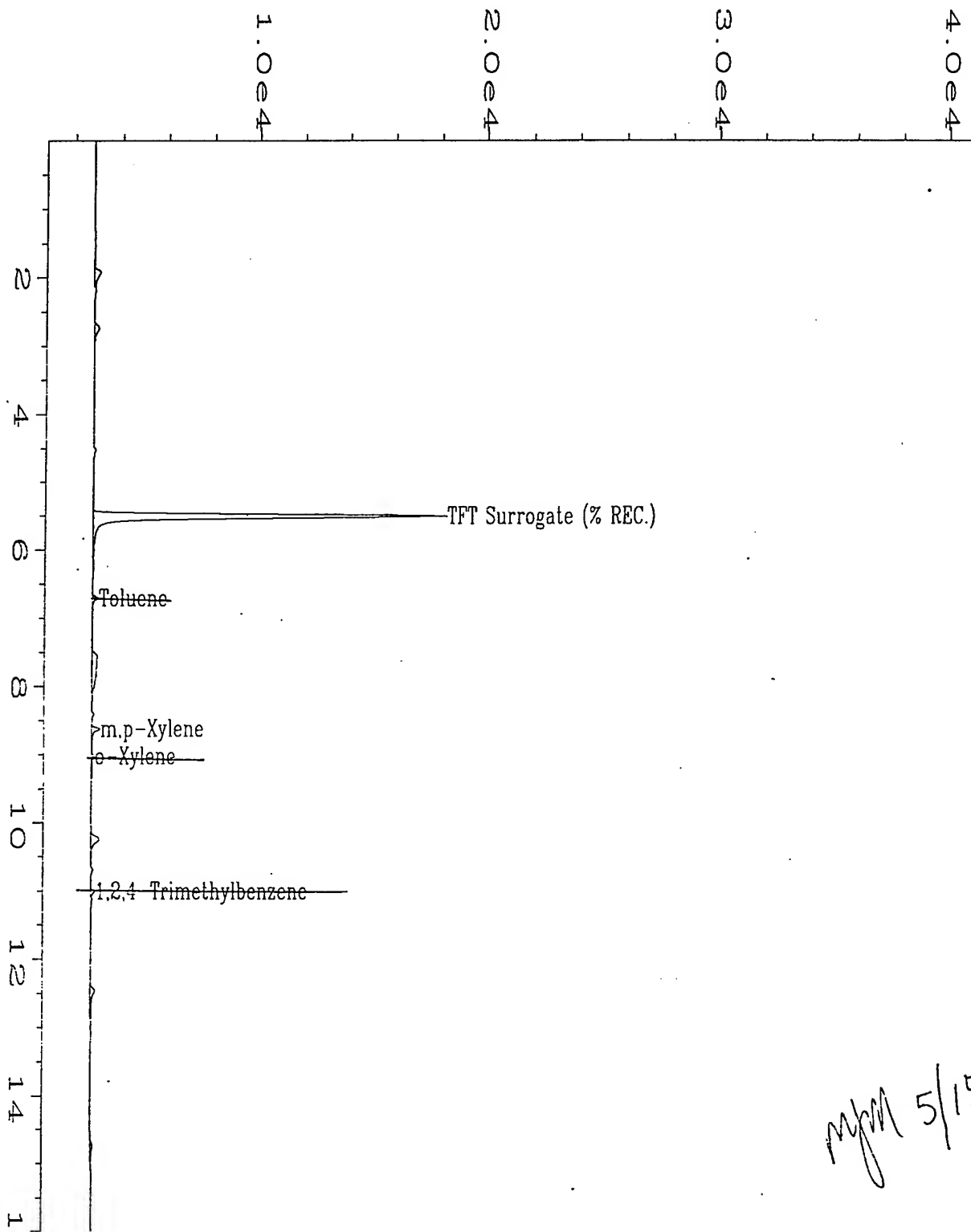
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

M. Magallon  
Approved



*mpm 5/15/95*

|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\019R1001.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 19          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05755;1;5                          | Sequence Line     | : 10          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20422.MTH |
| Acquired on        | : 22 Apr 95 09:18 PM                  | Analysis Method   | : BX20422.MTH |
| Report Created on: | : 24 Apr 95 06:44 PM                  | Sample Amount     | : 0           |
| Test Recalib on    | : 24 APR 95 06:19 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-1217; MW-8 11-12'; 5 GRAMS SOIL  |                   |               |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-80201

Method 8020 Data Report

Client Sample Number : MW-8 11-12'  
Lab Sample Number : X05755DUP  
Date Sampled : 4/12/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/22/95  
Date Analyzed : 4/22/95  
% Moisture : 20.45%

Client Project No. : 722450.26020/S  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX2042220  
Method Blank No. : MB042295

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 5.0                  |
| Toluene   | 108-88-3                          | U                                 | 5.0                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.0                  |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.0                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                                 | 5.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                                 | 5.0                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                                 | 5.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                                 | 5.0                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.0                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 88%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

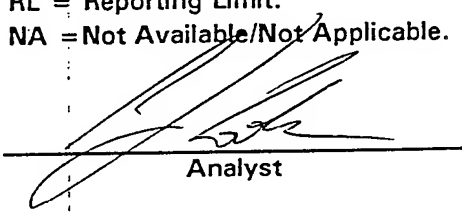
U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

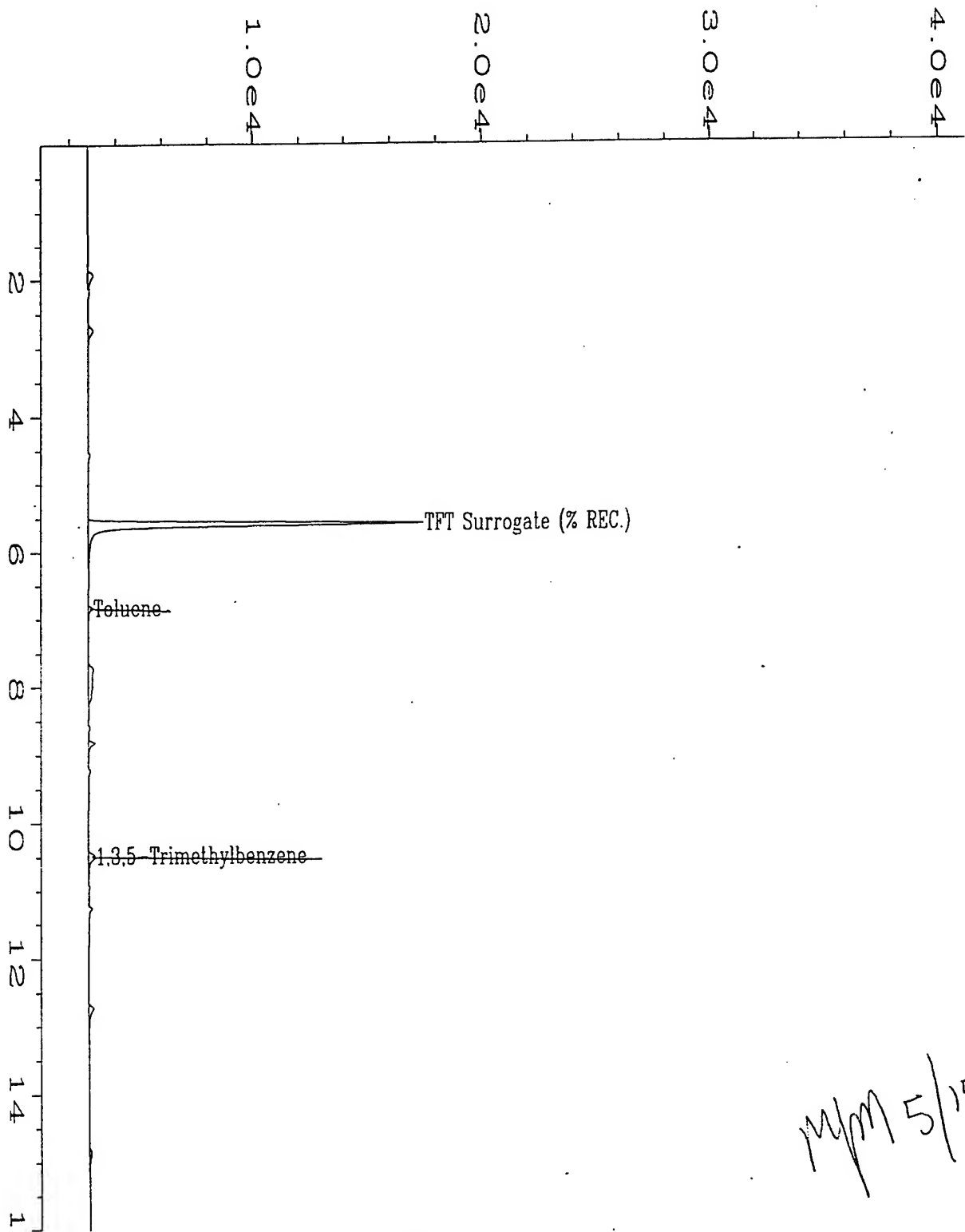
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



*mjm 5/15/95*

|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\020R1001.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 20          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05755DUP;1;5                       | Sequence Line     | : 10          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20422.MTH |
| Acquired on        | : 22 Apr 95 09:55 PM                  | Analysis Method   | : BX20422.MTH |
| Report Created on: | : 24 Apr 95 06:45 PM                  | Sample Amount     | : 0           |
| Recalib on         | : 24 APR 95 06:19 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-1217; MW-8 11-12'; 5 GRAMS SOIL  |                   |               |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-80201

Method 8020 Data Report

Client Sample Number : MW-9 15-16'  
Lab Sample Number : X05756  
Date Sampled : 4/12/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/22/95  
Date Analyzed : 4/23/95  
% Moisture : 17.55%

Client Project No. : 722450.26020/5  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX2042226  
Method Blank No. : MB042295

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg |    | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----|----------------------|
| Benzene   | 71-43-2                           | 0.8                               | J  | 4.9                  |
| Toluene   | 108-88-3                          |                                   | U  | 4.9                  |
| Chlorobenzene   | 108-90-7                          |                                   | U  | 4.9                  |
| Ethyl Benzene   | 100-41-4                          |                                   | U  | 4.9                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 0.7                               | J  | 4.9                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          |                                   | U  | 4.9                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           |                                   | U  | 4.9                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          |                                   | U  | 4.9                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 0.8                               | JB | 4.9                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 96%                               |    | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

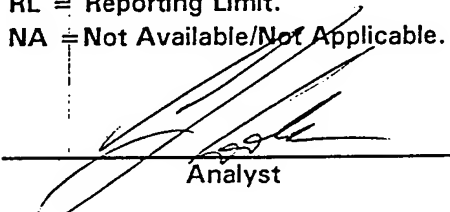
U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

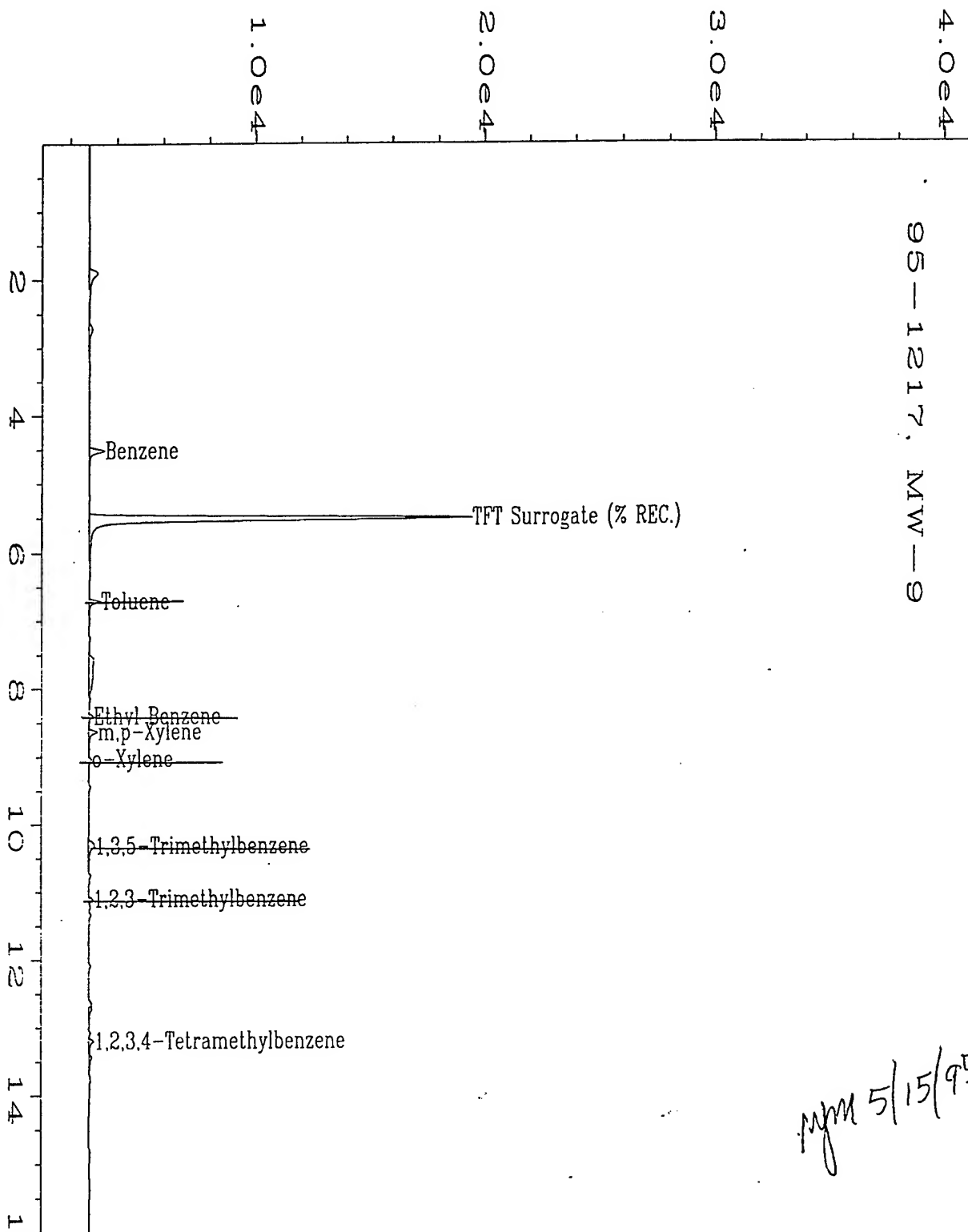
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



*mpm 5/15/95*

|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\026R1001.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 26          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05756;1;5                          | Sequence Line      | : 10          |
| Run Time Bar Code: |                                       | Instrument Method: | BX20422.MTH   |
| Acquired on        | : 23 Apr 95 01:31 AM                  | Analysis Method    | : BX20422.MTH |
| Report Created on: | 25 Apr 95 02:26 PM                    | Sample Amount      | : 0           |
| St Recalib on      | : 24 APR 95 06:19 PM                  | ISTD Amount        | :             |
| tiplier            | : 1                                   |                    |               |

Method 8020 Data Report

|                         |                |                    |                |
|-------------------------|----------------|--------------------|----------------|
| Client Sample Number    | : MW-10 10-11' | Client Project No. | : 722450.26021 |
| Lab Sample Number       | : X05757       | Lab Project No.    | : 95-1217      |
| Date Sampled            | : 4/12/95      | Dilution Factor    | : 1.00         |
| Date Received           | : 4/14/95      | Method             | : 8020         |
| Date Extracted/Prepared | : 4/20/95      | Matrix             | : Soil         |
| Date Analyzed           | : 4/21/95      | Lab File No.       | : BX1042030    |
| % Moisture              | : 21.90%       | Method Blank No.   | : MB042095     |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg        |
|---|-----------------------------------|-----------------------------------|---------------------|
| Benzene   | 71-43-2                           | U                                 | 5.1                 |
| Toluene   | 108-88-3                          | 0.7 J                             | 5.1                 |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.1                 |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.1                 |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 1.6 J                             | 5.1                 |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 0.5 J                             | 5.1                 |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 0.5 J                             | 5.1                 |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                                 | 5.1                 |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.1                 |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 72%                               | 50%-150% (QC limit) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

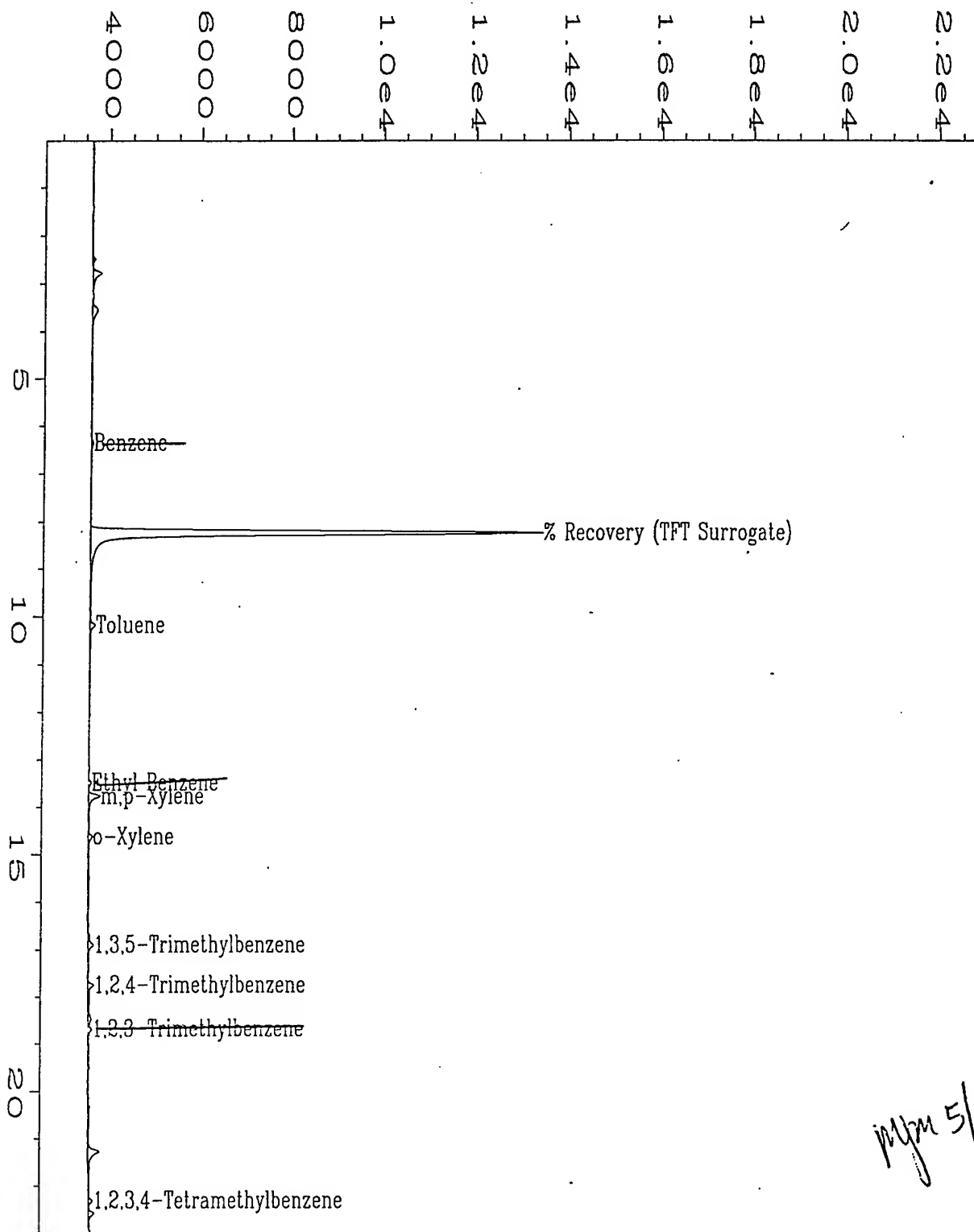
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

M. M. M.  
Approved



*mjm 5/15/95*

|                    |                                       |                   |                   |
|--------------------|---------------------------------------|-------------------|-------------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\030F0701.D | Page Number       | : 1               |
| Operator           | : SW Tyson                            | Vial Number       | : 30              |
| Instrument         | : BTEX1                               | Injection Number  | : 1               |
| Sample Name        | : X05757;1;5                          | Sequence Line     | : 7               |
| Run Time Bar Code: |                                       | Instrument Method | : BX10420.MTH     |
| Acquired on        | : 21 Apr 95 04:34 AM                  | Analysis Method   | : BX10420B.MTH    |
| Report Created on: | : 21 Apr 95 12:52 PM                  | Sample Amount     | : 0               |
| Recalib on         | : 21 APR 95 12:15 PM                  | ISTD Amount       | :                 |
| Multiplier         | : 1                                   |                   |                   |
| Sample Info        | : PROJECT#: 95-1217                   | CLIENT#:          | MW-10 10-11' SOIL |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

Client Sample Number : MW-10 11-12'  
Lab Sample Number : X05758  
Date Sampled : 4/12/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/20/95  
Date Analyzed : 4/20/95  
% Moisture : 21.37%

Client Project No. : 722450.26020/Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX1042013  
Method Blank No. : MB042095

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 5.1                  |
| Toluene   | 108-88-3                          | U                                 | 5.1                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.1                  |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.1                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                                 | 5.1                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                                 | 5.1                  |
| ,2,4-Trimethylbenzene   | 95-63-6                           | U                                 | 5.1                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                                 | 5.1                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.1                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 86%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

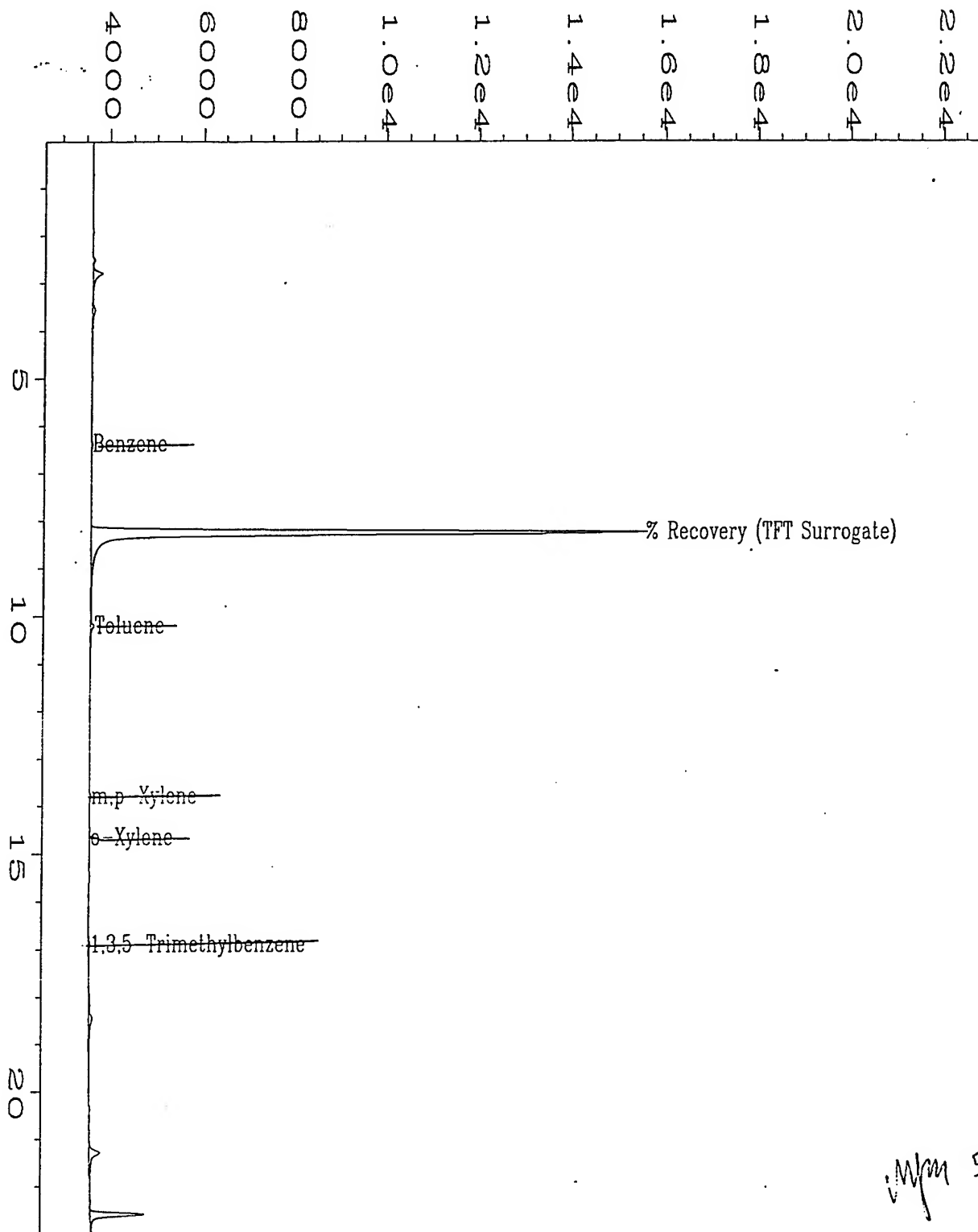
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

Murphy  
Approved



*m/m 5/15/95*

|                    |  |                    |                |
|--------------------|--|--------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\013F0701.D          | Page Number        | : 1            |
| Operator           | : SW Tyson                                     | Vial Number        | : 13           |
| Instrument         | : BTEX1  | Injection Number   | : 1            |
| Sample Name        | : X05758;1;5                                   | Sequence Line      | : 7            |
| Run Time Bar Code: |  | Instrument Method: | BX10420.MTH    |
| Acquired on        | : 20 Apr 95 05:13 PM                           | Analysis Method    | : BX10420B.MTH |
| Report Created on: | 21 Apr 95 12:40 PM                             | Sample Amount      | : 0            |
| Last Recalib on    | : 21 APR 95 12:15 PM                           | ISTD Amount        | :              |
| Multiplier         | : 1  |                    |                |
| Sample Info        | : Project # 95-1217 Client # MW-10 11-12' Soil |                    |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

Client Sample Number : MW-10 11-12'  
Lab Sample Number : X05758DUP  
Date Sampled : 4/12/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/20/95  
Date Analyzed : 4/20/95  
% Moisture : 21.37%

Client Project No. : 722450.26020/Seymo  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX2042016  
Method Blank No. : MB042095

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                                 | 5.1                  |
| Toluene   | 108-88-3                          | U                                 | 5.1                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.1                  |
| Ethyl Benzene   | 100-41-4                          | U                                 | 5.1                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                                 | 5.1                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                                 | 5.1                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                                 | 5.1                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                                 | 5.1                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.1                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 64%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

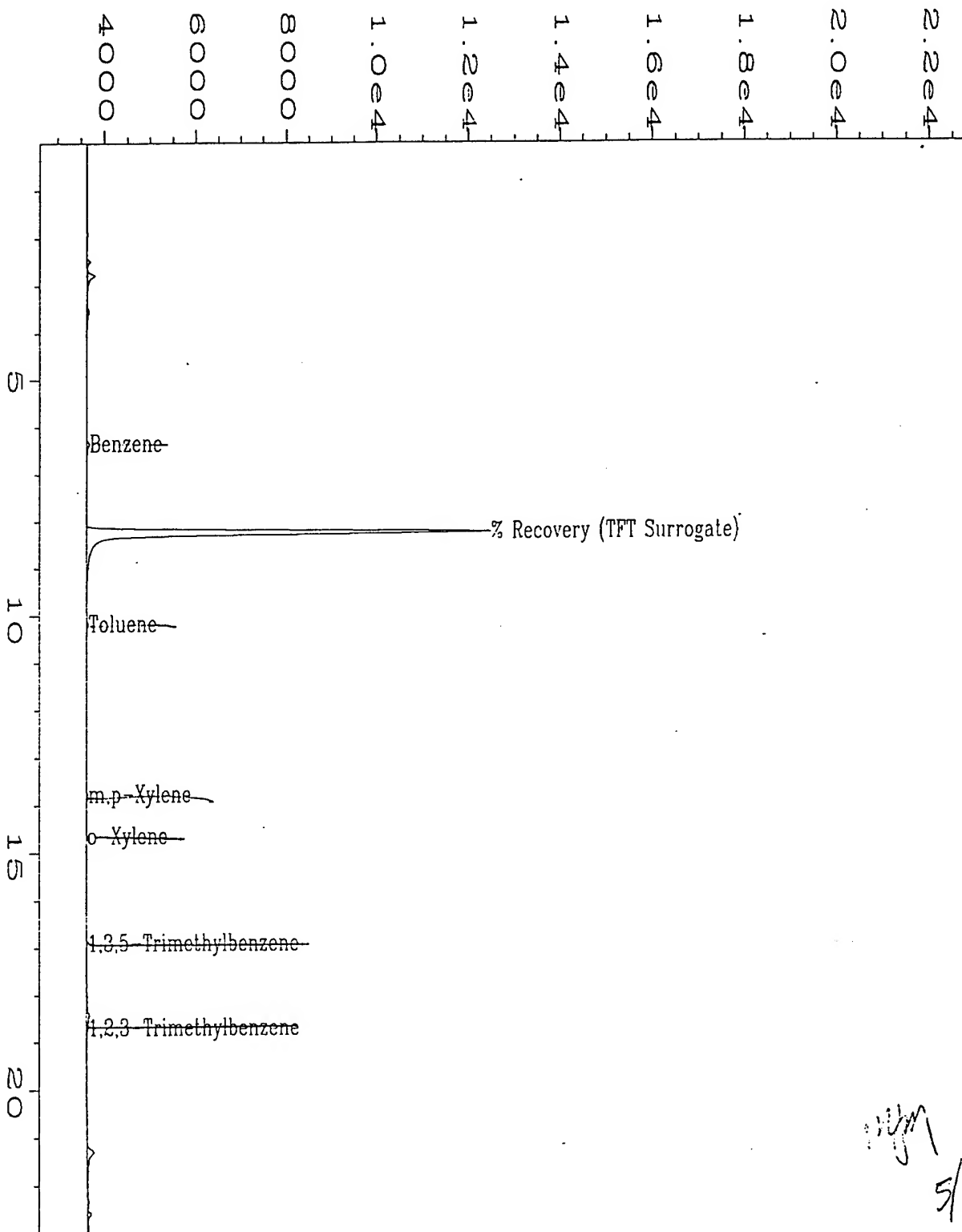
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



5/15/95

|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\016F0701.D           | Page Number       | : 1            |
| Operator           | : SW Tyson                                      | Vial Number       | : 16           |
| Instrument         | : BTEX1   | Injection Number  | : 1            |
| Sample Name        | : X05758Dup;1;5                                 | Sequence Line     | : 7            |
| Run Time Bar Code: |   | Instrument Method | : BX10420.MTH  |
| Acquired on        | : 20 Apr 95 07:12 PM                            | Analysis Method   | : BX10420B.MTH |
| Report Created on: | : 21 Apr 95 12:41 PM                            | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 12:15 PM                            | ISTD Amount       | :              |
| Multiplier         | : 1   |                   |                |
| Sample Info        | : Project # 95-1217 Client # MW-10 11-12' Dupl. |                   |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

|                         |                    |                    |                                 |
|-------------------------|--------------------|--------------------|---------------------------------|
| Client Sample Number    | : MW-11 11.5-13.5' | Client Project No. | : 722450.26020/Seym Johnson AFB |
| Lab Sample Number       | : X05759           | Lab Project No.    | : 95-1217                       |
| Date Sampled            | : 4/13/95          | Dilution Factor    | : 1.00                          |
| Date Received           | : 4/14/95          | Method             | : 8020                          |
| Date Extracted/Prepared | : 4/22/95          | Matrix             | : Soil                          |
| Date Analyzed           | : 4/23/95          | Lab File No.       | : BX2042227                     |
| % Moisture              | : 21.70%           | Method Blank No.   | : MB042295                      |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | 6.2                               | 5.1                  |
| Toluene   | 108-88-3                          | 4.2                               | 5.1                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 5.1                  |
| Ethyl Benzene   | 100-41-4                          | 2.8 J                             | 5.1                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 33                                | 5.1                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                                 | 5.1                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 4.9                               | 5.1                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 1.8 J                             | 5.1                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                                 | 5.1                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 80%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

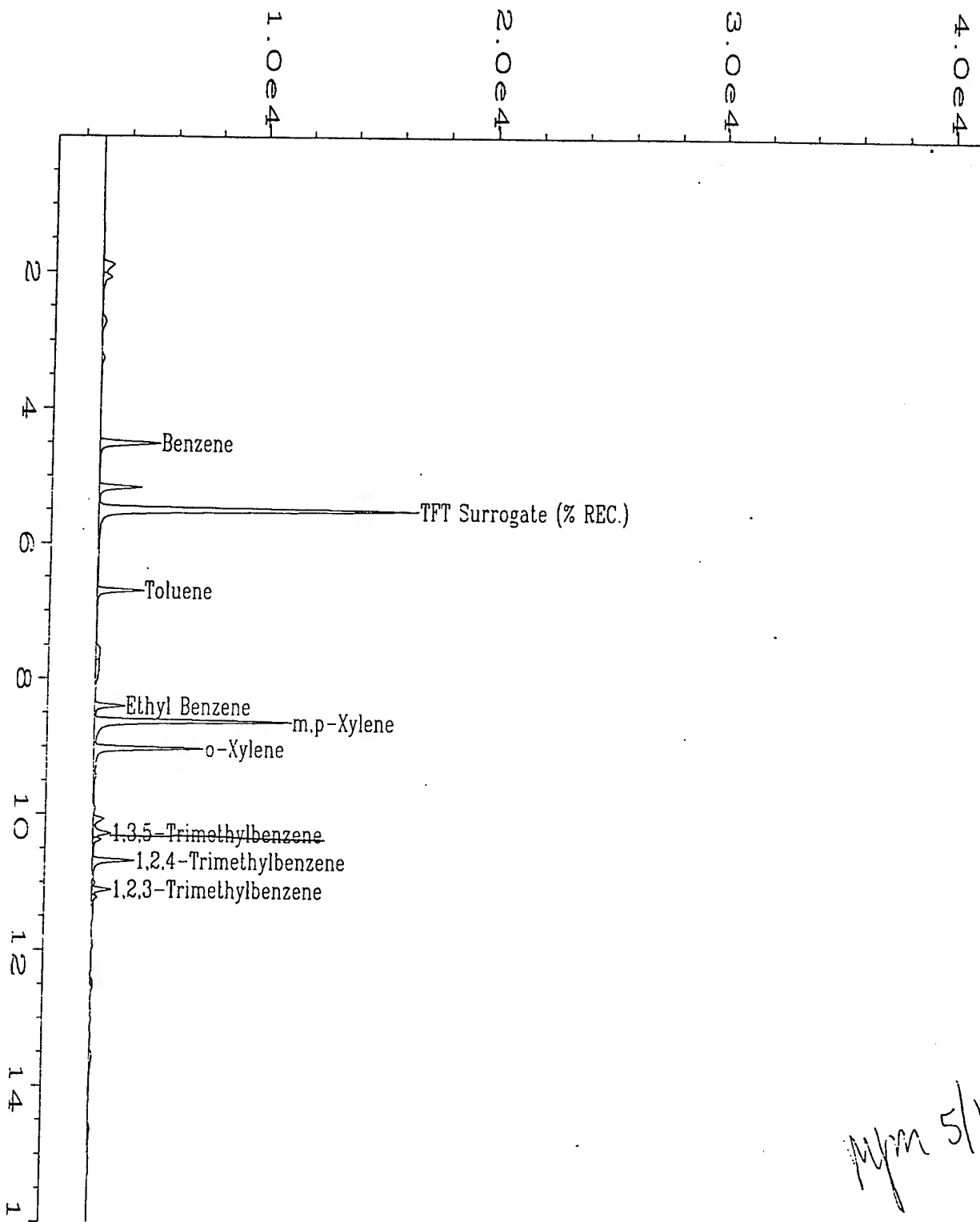
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

WPM  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\027R1001.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 27          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05759;1;5                          | Sequence Line     | : 10          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20422.MTH |
| Acquired on        | : 23 Apr 95 02:08 AM                  | Analysis Method   | : BX20422.MTH |
| Report Created on: | 25 Apr 95 02:24 PM                    | Sample Amount     | : 0           |
| Recalib on         | : 24 APR 95 06:19 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

MW-11 11.5-13.5'

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

Client Sample Number : SS-1 11.5-13.5  
Lab Sample Number : X05760  
Date Sampled : 4/13/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/25/95  
Date Analyzed : 4/25/95  
% Moisture : 8.40%

Client Project No. : 722450.26020/Seyr  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1250.00  
Method : 8020  
Matrix : Soil/Extract  
Lab File No. : BX2042516  
Method Blank No. : MEB042595

| Compound Name               | Cas Number                        | Sample*       |   | RL*   |
|-----------------------------|-----------------------------------|---------------|---|-------|
|                             |                                   | Concentration |   |       |
|                             |                                   | ug/Kg         |   | ug/Kg |
| Benzene                     | 71-43-2                           | 2100          | J | 5500  |
| Toluene                     | 108-88-3                          | 16000         |   | 5500  |
| Chlorobenzene               | 108-90-7                          | 6000          |   | 5500  |
| Ethyl Benzene               | 100-41-4                          | 21000         |   | 5500  |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | 130000        | B | 5500  |
| 1,3,5-Trimethylbenzene      | 108-67-8                          | 27000         |   | 5500  |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | 77000         |   | 5500  |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | 28000         | B | 5500  |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | 20000         |   | 5500  |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 87% 50%-150% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.


U = Compound analyzed for, but not detected.

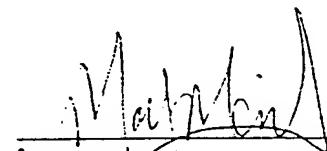
B = Compound also found in the blank.

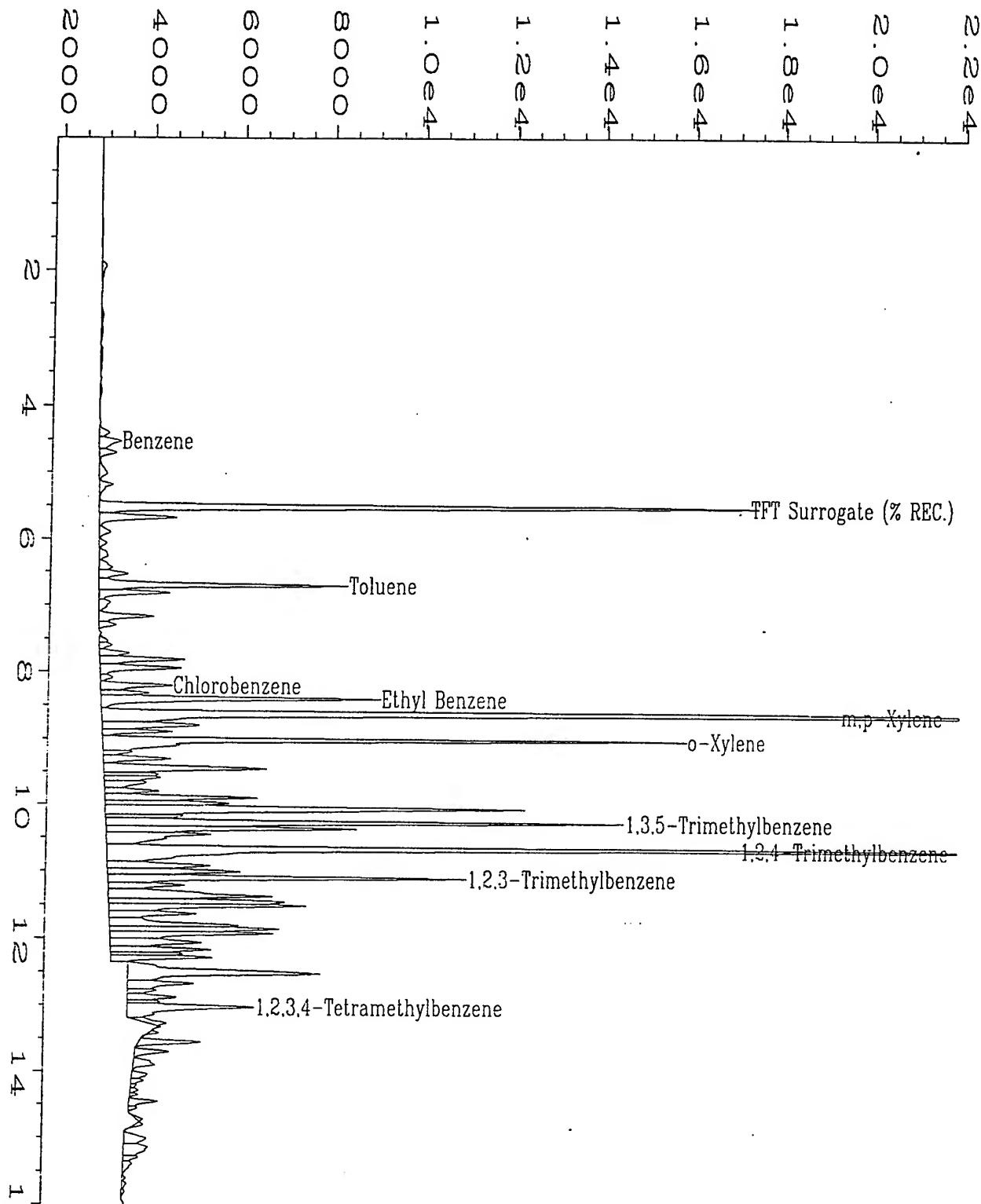
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |   |                   |               |
|--------------------|---|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20425\016R0101.D                     | Page Number       | : 1           |
| Operator           | : S.W. Tyson  | Vial Number       | : 16          |
| Instrument         | : BTEX2   | Injection Number  | : 1           |
| Sample Name        | : X05760;1250;.004  | Sequence Line     | : 1           |
| Run Time Bar Code: |   | Instrument Method | : BX20425.MTH |
| Acquired on        | : 25 Apr 95 06:17 PM                                      | Analysis Method   | : BX20425.MTH |
| Report Created on: | : 12 May 95 06:23 PM                                      | Sample Amount     | : 0           |
| Recalib on         | : 26 APR 95 09:49 AM                                      | ISTD Amount       | :             |
| Multiplier         | : 1365  |                   |               |
| Sample Info        | : Project # 95-1217 Client # SS-1 11.5-13.5 Soil Extract; |                   |               |
|                    | : 8.40% moisture  |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

|                         |                       |                    |                                 |
|-------------------------|-----------------------|--------------------|---------------------------------|
| Client Sample Number    | : SS-1 11.5-13.5 Dup. | Client Project No. | : 722450.26020/Seym Johnson AFB |
| Lab Sample Number       | : X05760FD            | Lab Project No.    | : 95-1217                       |
| Date Sampled            | : 4/13/95             | Dilution Factor    | : 1250.00                       |
| Date Received           | : 4/14/95             | Method             | : 8020                          |
| Date Extracted/Prepared | : 4/25/95             | Matrix             | : Soil/Extract                  |
| Date Analyzed           | : 4/25/95             | Lab File No.       | : BX2042517                     |
| % Moisture              | : 8.40%               | Method Blank No.   | : MEB042595                     |

| Compound Name               | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg |
|-----------------------------|-----------------------------------|-----------------------------------|--------------|
| Benzene                     | 71-43-2                           | 3400 J                            | 5500         |
| Toluene                     | 108-88-3                          | 27000                             | 5500         |
| Chlorobenzene               | 108-90-7                          | 8700                              | 5500         |
| Ethyl Benzene               | 100-41-4                          | 33000                             | 5500         |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | 21000 B                           | 5500         |
| 1,3,5-Trimethylbenzene      | 108-67-8                          | 44000                             | 5500         |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | **                                | 5500         |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | 44000 B                           | 5500         |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | 31000                             | 5500         |

|   |     |                      |
|---|-----|----------------------|
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): | 87% | 50%-150% (QC limits) |
|---|-----|----------------------|

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

\*\* = See BX2042614 for noted values, DF = 2500.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

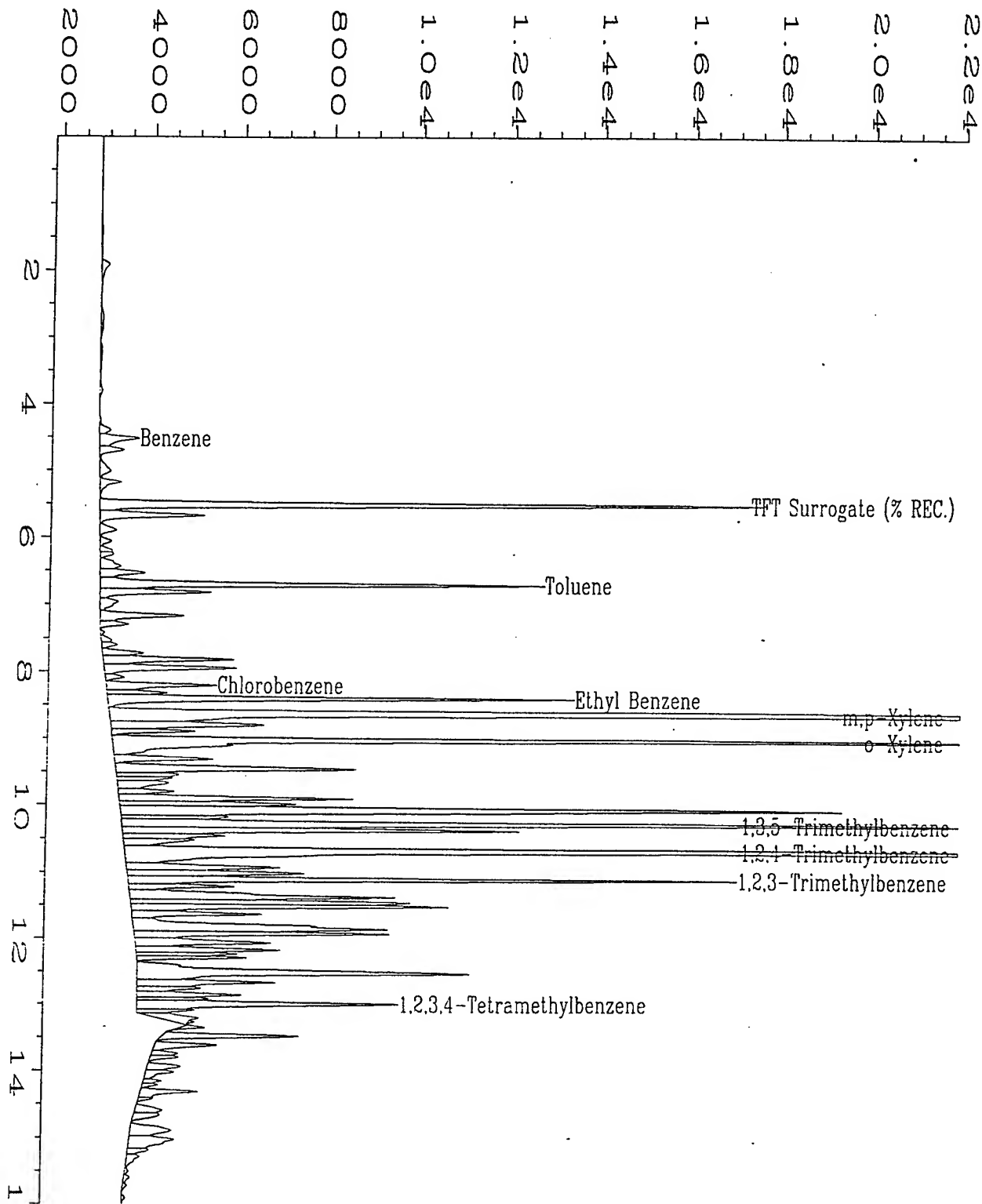
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

M. Martin  
Approved:



|                    |  |                   |               |
|--------------------|--|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20425\017R0101.D  | Page Number       | : 1           |
| Operator           | : S.W. Tyson   | Vial Number       | : 17          |
| Instrument         | : BTEX2  | Injection Number  | : 1           |
| Sample Name        | : X05760Dup;1250;  | Sequence Line     | : 1           |
| Run Time Bar Code: |  | Instrument Method | : BX20425.MTH |
| Acquired on        | : 25 Apr 95 06:56 PM   | Analysis Method   | : BX20425.MTH |
| Report Created on: | : 12 May 95 06:23 PM   | Sample Amount     | : 0           |
| : Recalib on       | : 26 APR 95 09:49 AM   | ISTD Amount       | :             |
| Multiplier         | : 1365   |                   |               |
| Sample Info        | : Project # 95-1217 Client # SS-1 11.5-13.5 Dup. (New Ex 4/25); 8.40% moisture |                   |               |

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(303) 425-80201

Method 8020 Data Report

|                         |                       |                    |                                 |
|-------------------------|-----------------------|--------------------|---------------------------------|
| Client Sample Number    | : SS-1 11.5-13.5 Dup. | Client Project No. | : 722450.26020/Seym Johnson AFB |
| Lab Sample Number       | : X05760FD            | Lab Project No.    | : 95-1217                       |
| Date Sampled            | : 4/13/95             | Dilution Factor    | : 2500.00                       |
| Date Received           | : 4/14/95             | Method             | : 8020                          |
| Date Extracted/Prepared | : 4/26/95             | Matrix             | : Soil/Extract                  |
| Date Analyzed           | : 4/26/95             | Lab File No.       | : BX2042614                     |
| % Moisture              | : 8.40%               | Method Blank No.   | : MEB042595                     |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                                | **                   |
| Toluene   | 108-88-3                          | **                                | **                   |
| Chlorobenzene   | 108-90-7                          | **                                | **                   |
| Ethyl Benzene   | 100-41-4                          | **                                | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                                | **                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                                | **                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 14000                             | 11000                |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                                | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                                | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 100%                              | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

\*\* = See BX2042517 for noted values, DF = 1250.

QUALIFIERS:

E = Extrapolated value.

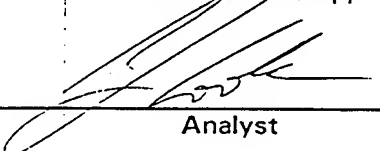
U = Compound analyzed for, but not detected.


B = Compound also found in the blank.

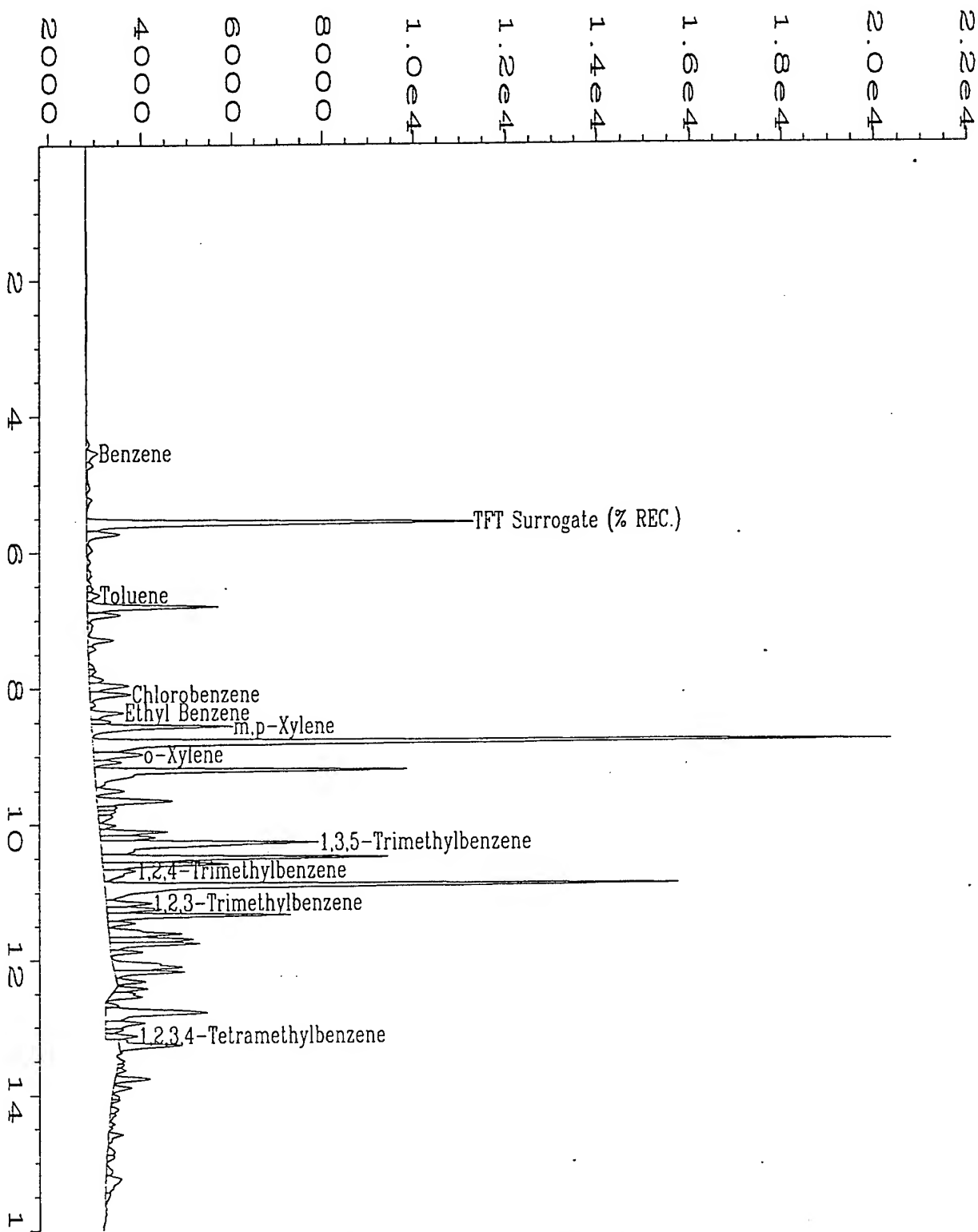
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |  |                   |               |
|--------------------|--|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20426\014R1001.D                    | Page Number       | : 1           |
| Operator           | : S.W. Tyson   | Vial Number       | : 14          |
| Instrument         | : BTEX2  | Injection Number  | : 1           |
| Sample Name        | : X05760DUP;2500;  | Sequence Line     | : 10          |
| Run Time Bar Code: |  | Instrument Method | : BX20426.MTH |
| Acquired on        | : 26 Apr 95 05:14 PM                                     | Analysis Method   | : BX20426.MTH |
| Report Created on: | 26 Apr 95 07:01 PM                                       | Sample Amount     | : 0           |
| Recalib on         | : 26 APR 95 02:33 PM                                     | ISTD Amount       | :             |
| Multiplier         | : 2500   |                   |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-1 11.5-13.5 Soil Extract |                   |               |

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(303) 425-80201

Method 8020 Data Report

|                         |                |                    |                     |
|-------------------------|----------------|--------------------|---------------------|
| Client Sample Number    | : SS-1 16'-18' | Client Project No. | : 722450.26020/Seym |
| Lab Sample Number       | : X05762       |                    | Johnson AFB         |
| Date Sampled            | : 4/13/95      | Lab Project No.    | : 95-1217           |
| Date Received           | : 4/14/95      | Dilution Factor    | : 1.00              |
| Date Extracted/Prepared | : 4/26/95      | Method             | : 8020              |
| Date Analyzed           | : 4/26/95      | Matrix             | : Soil              |
| % Moisture              | : 7.85%        | Lab File No.       | : BX2042613         |
|                         |                | Method Blank No.   | : MB042695          |

| Compound Name               | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg |
|-----------------------------|-----------------------------------|-----------------------------------|--------------|
| Benzene                     | 71-43-2                           | 0.9 J                             | 4.3          |
| Toluene                     | 108-88-3                          | 5.1                               | 4.3          |
| Chlorobenzene               | 108-90-7                          | U                                 | 4.3          |
| Ethyl Benzene               | 100-41-4                          | U                                 | 4.3          |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | 1.1 BJ                            | 4.3          |
| 1,3,5-Trimethylbenzene      | 108-67-8                          | 1.2 BJ                            | 4.3          |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | U                                 | 4.3          |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | U                                 | 4.3          |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | U                                 | 4.3          |

Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): 93% 50%-150% (QC limits)

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

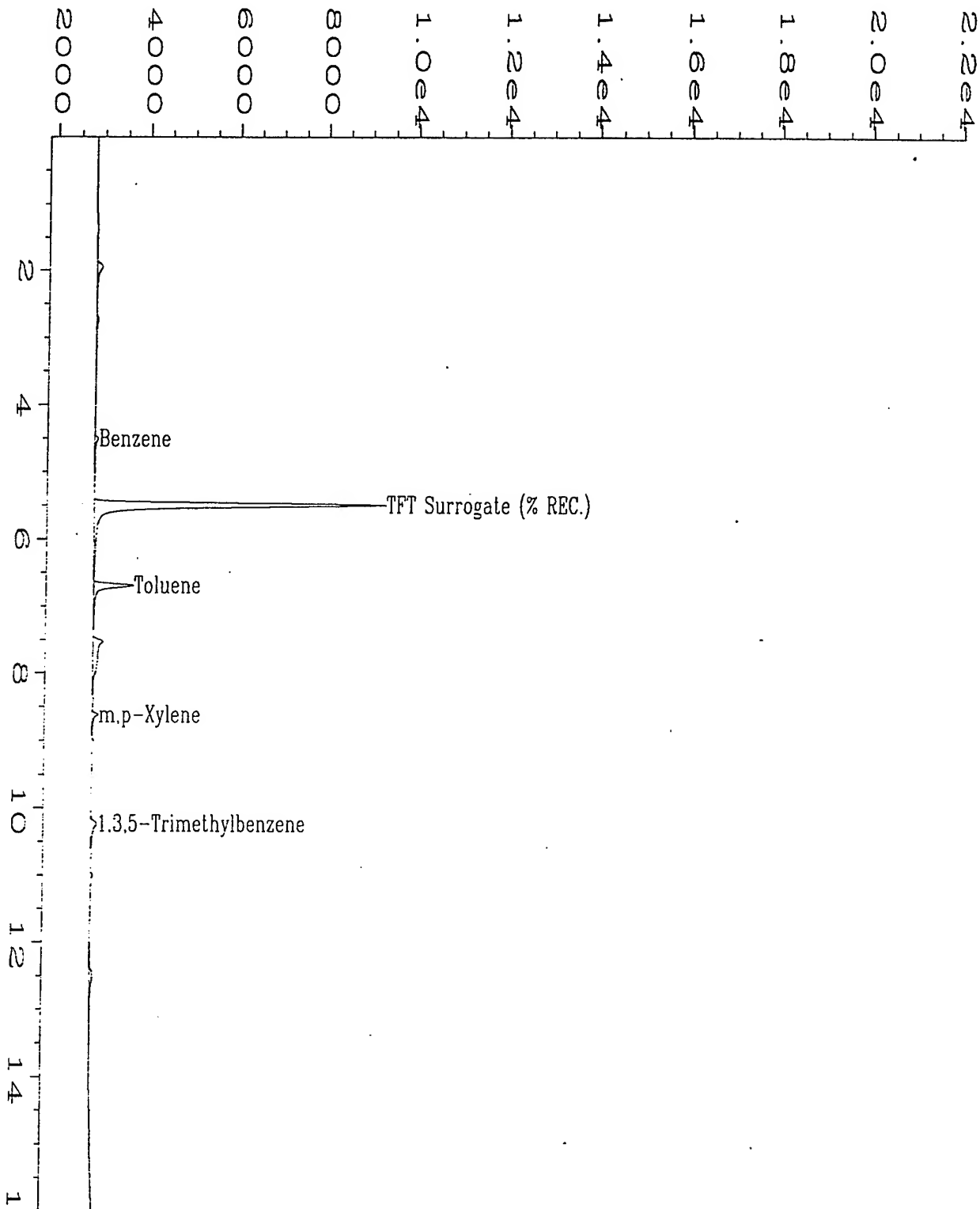
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

Analyst

Approved



|                    |                                       |                   |                   |
|--------------------|---------------------------------------|-------------------|-------------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20426\013R1001.D | Page Number       | : 1               |
| Operator           | : S.W. Tyson                          | Vial Number       | : 13              |
| Instrument         | : BTEX2                               | Injection Number  | : 1               |
| Sample Name        | : X05762;1;5                          | Sequence Line     | : 10              |
| Run Time Bar Code: |                                       | Instrument Method | : BX20426.MTH     |
| Acquired on        | : 26 Apr 95 04:36 PM                  | Analysis Method   | : BX20426.MTH     |
| Report Created on: | : 26 Apr 95 07:01 PM                  | Sample Amount     | : 0               |
| : Recalib on       | : 26 APR 95 02:33 PM                  | ISTD Amount       | :                 |
| Multiplier         | : 1                                   |                   |                   |
| Sample Info        | : PROJECT # 95-1217                   | CLIENT #          | SS-1 16'-18' Soil |

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Method 8020 Data Report

Client Sample Number : SS-2 11.5-13.5  
Lab Sample Number : X05763  
Date Sampled : 4/13/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/23/95  
Date Analyzed : 4/23/95  
% Moisture : 6.62%

Client Project No. : 722450.26020/Seym  
Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1.00  
Method : 8020  
Matrix : Soil  
Lab File No. : BX2042316  
Method Blank No. : MB042395

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | 16                                | 4.3                  |
| Toluene   | 108-88-3                          | 29                                | 4.3                  |
| Chlorobenzene   | 108-90-7                          | U                                 | 4.3                  |
| Ethyl Benzene   | 100-41-4                          | 9.2                               | 4.3                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 35 B                              | 4.3                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 3.7 BJ                            | 4.3                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 3.7 J                             | 4.3                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 1.2 BJ                            | 4.3                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 3.7 J                             | 4.3                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 94%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

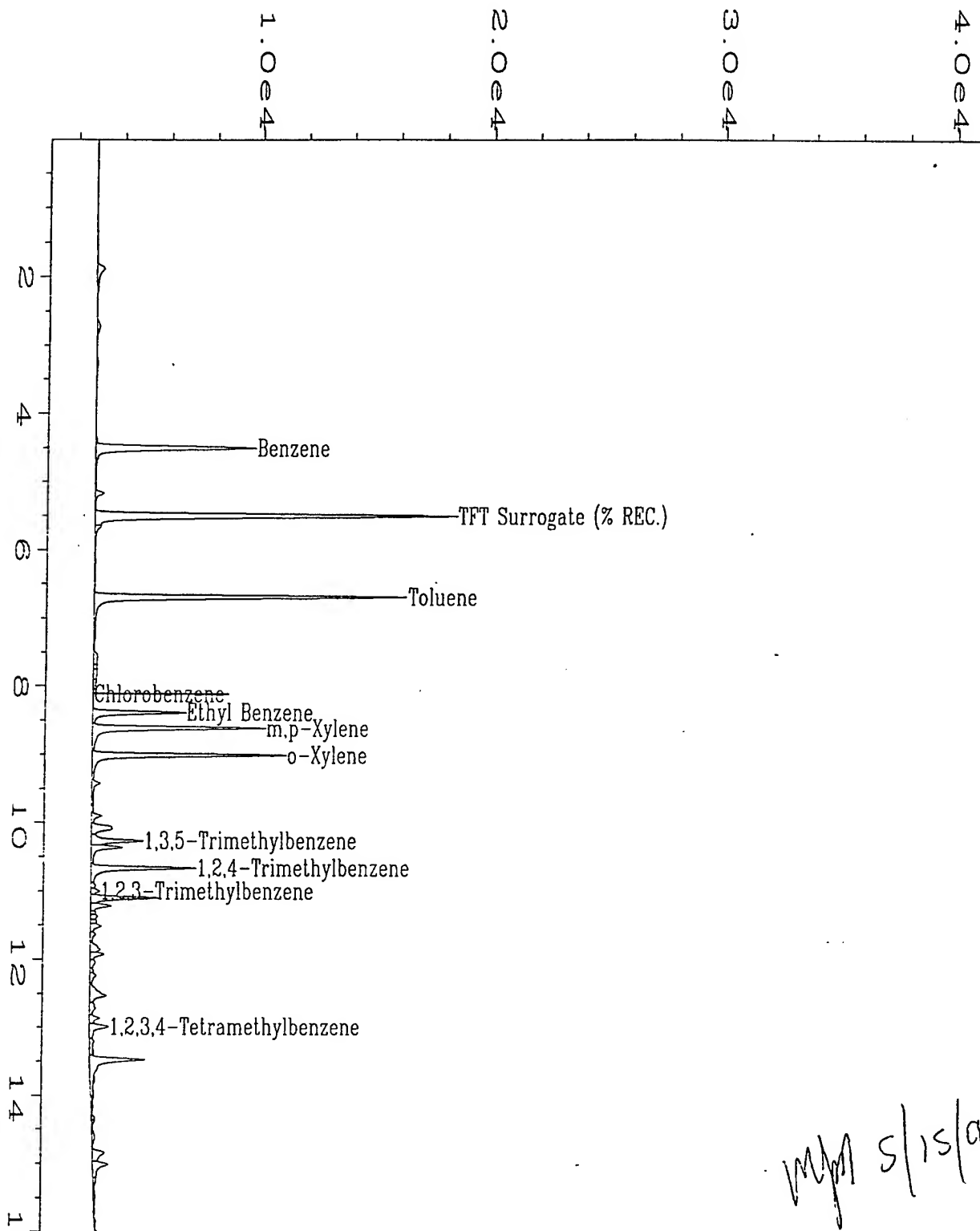
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

[Signature]  
Approved



*mjm 5/15/95*

|                    |  |                   |               |
|--------------------|--|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20423\016R0901.D                        | Page Number       | : 1           |
| Operator           | : T.Lockwood   | Vial Number       | : 16          |
| Instrument         | : BTEX2  | Injection Number  | : 1           |
| Sample Name        | : X05763;1;5   | Sequence Line     | : 9           |
| Run Time Bar Code: |  | Instrument Method | : BX20423.MTH |
| Acquired on        | : 23 Apr 95 05:49 PM   | Analysis Method   | : BX20423.MTH |
| Port Created on:   | 25 Apr 95 04:50 PM   | Sample Amount     | : 0           |
| Recalib on         | : 25 APR 95 04:27 PM   | ISTD Amount       | :             |
| Multiplier         | : 1  |                   |               |
| Sample Info        | : 95-1217; SS-2 11 1/2-13 1/2'; 5 GRAMS SOIL/ext. <i>12K</i> |                   |               |

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Method 8020 Data Report

|                         |                  |                    |                                 |
|-------------------------|------------------|--------------------|---------------------------------|
| Client Sample Number    | : SS-2 11.5-13.5 | Client Project No. | : 722450.26020/Seyn Johnson AFB |
| Lab Sample Number       | : X05763DUP      | Lab Project No.    | : 95-1217                       |
| Date Sampled            | : 4/13/95        | Dilution Factor    | : 1.00                          |
| Date Received           | : 4/14/95        | Method             | : 8020                          |
| Date Extracted/Prepared | : 4/23/95        | Matrix             | : Soil                          |
| Date Analyzed           | : 4/23/95        | Lab File No.       | : BX2042317                     |
| % Moisture              | : 6.62%          | Method Blank No.   | : MB042395                      |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | 35                                | 4.3                  |
| Toluene   | 108-88-3                          | 59                                | 4.3                  |
| Chlorobenzene   | 108-90-7                          | 0.5 J                             | 4.3                  |
| Ethyl Benzene   | 100-41-4                          | 19                                | 4.3                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 63 B                              | 4.3                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 7.1 B                             | 4.3                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 20                                | 4.3                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 1.7 BJ                            | 4.3                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 6.5                               | 4.3                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 88%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

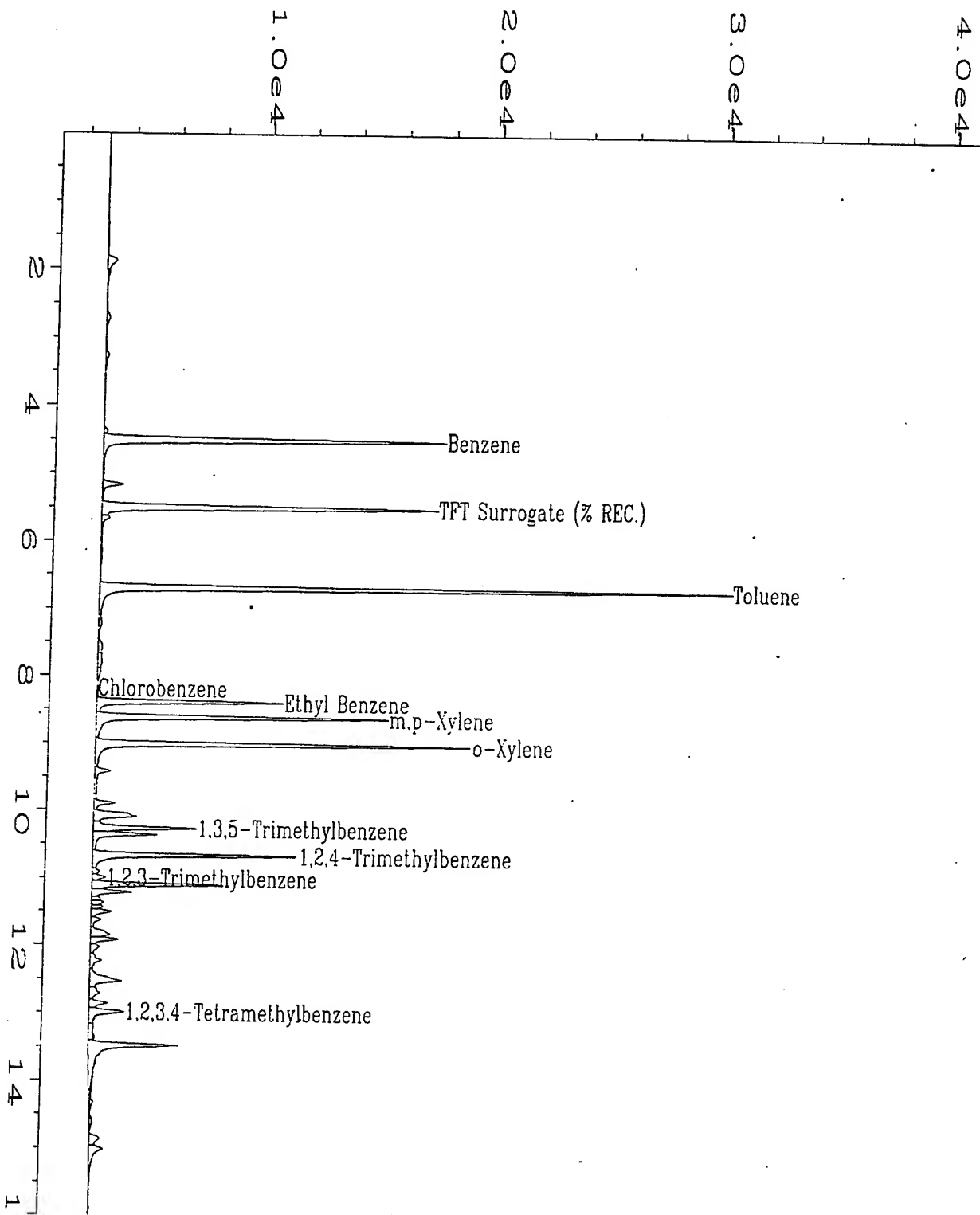
RL = Reporting Limit.

NA = Not Available/Not Applicable.

*K. Cone*

Analyst

Approved *[Signature]*



|                    |   |                   |               |
|--------------------|---|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20423\017R0901.D             | Page Number       | : 1           |
| Operator           | : T.Lockwood                                      | Vial Number       | : 17          |
| Instrument         | : BTEX2   | Injection Number  | : 1           |
| Sample Name        | : X05763DUP;1;5                                   | Sequence Line     | : 9           |
| Run Time Bar Code: |   | Instrument Method | : BX20423.MTH |
| Acquired on        | : 23 Apr 95 06:25 PM                              | Analysis Method   | : BX20423.MTH |
| Report Created on: | 25 Apr 95 04:50 PM                                | Sample Amount     | : 0           |
| Int Recalib on     | : 25 APR 95 04:27 PM                              | ISTD Amount       |               |
| Multiplier         | : 1   |                   |               |
| Sample Info        | : 95-1217; SS-2 11 1/2-13 1/2'; 5 GRAMS SOIL/ext. |                   |               |

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Method 8020 Data Report

|                         |             |                    |                                     |
|-------------------------|-------------|--------------------|-------------------------------------|
| Client Sample Number    | : SS-3 9-11 | Client Project No. | : 722450.26020/5071n<br>Johnson AFB |
| Lab Sample Number       | : X05764    | Lab Project No.    | : 95-1217                           |
| Date Sampled            | : 4/13/95   | Dilution Factor    | : 125.00                            |
| Date Received           | : 4/14/95   | Method             | : 8020                              |
| Date Extracted/Prepared | : 4/23/95   | Matrix             | : Soil/Extract                      |
| Date Analyzed           | : 4/23/95   | Lab File No.       | : BX2042318                         |
| % Moisture              | : 7.69%     | Method Blank No.   | : MEB042395                         |

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | 630                               | 540                  |
| Toluene   | 108-88-3                          | 8100                              | 540                  |
| Chlorobenzene   | 108-90-7                          | 770                               | 540                  |
| Ethyl Benzene   | 100-41-4                          | **                                | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                                | **                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                                | **                   |
| 2,4-Trimethylbenzene  | 95-63-6                           | **                                | **                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                                | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                                | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 102%                              | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

\*\* = See BX2042615 for noted values, df = 1250.

QUALIFIERS:

E = Extrapolated value.

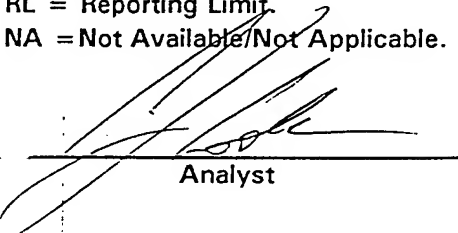
U = Compound analyzed for, but not detected.

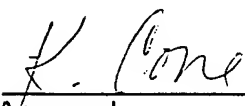
B = Compound also found in the blank.

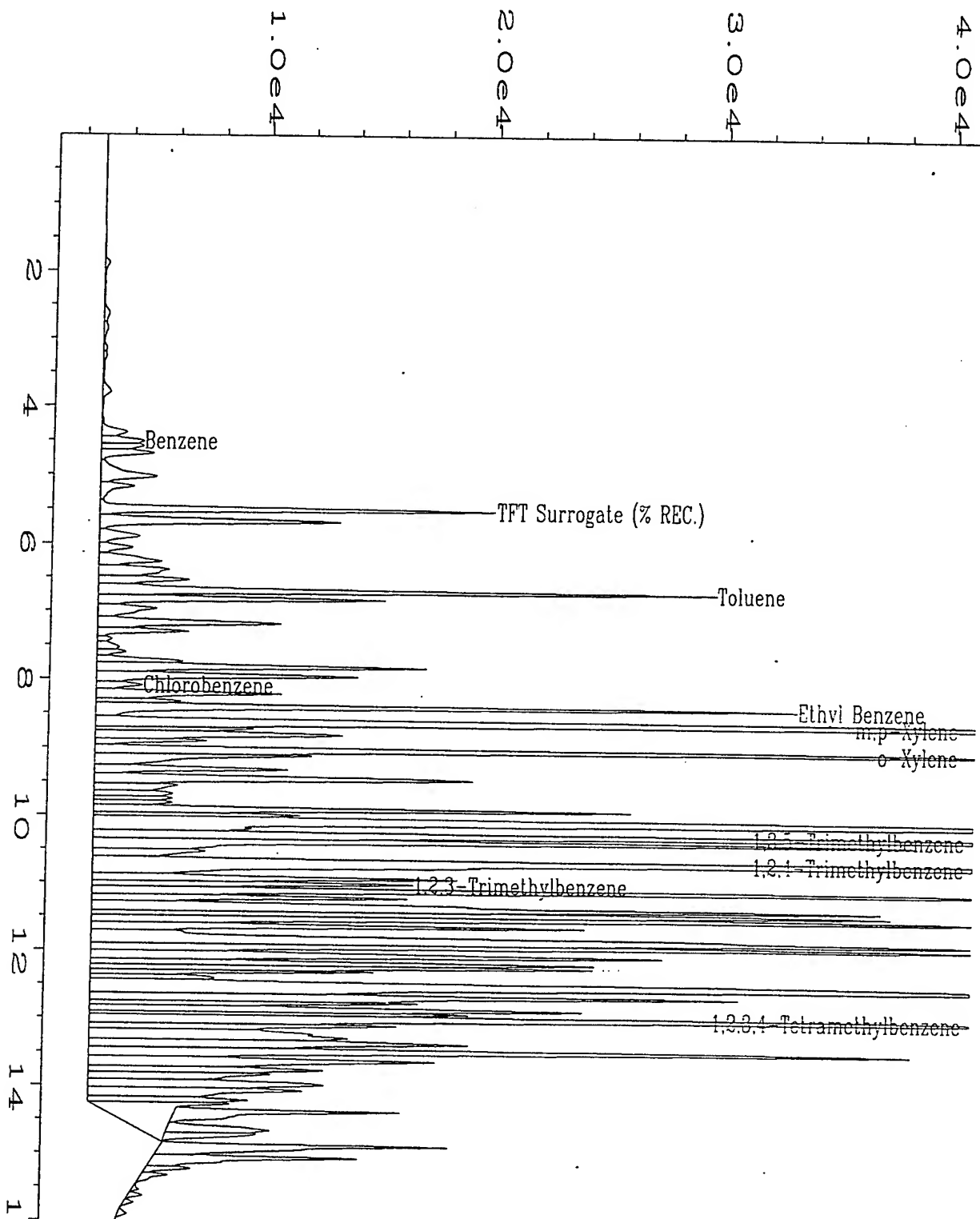
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |   |                    |               |
|--------------------|---|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20423\018R0901.D   | Page Number        | : 1           |
| Operator           | : T.Lockwood                            | Vial Number        | : 18          |
| Instrument         | : BTEX2 125                             | Injection Number   | : 1           |
| Sample Name        | : X05764;X;5                            | Sequence Line      | : 9           |
| Run Time Bar Code: |   | Instrument Method: | BX20423.MTH   |
| Acquired on        | : 23 Apr 95 07:01 PM                    | Analysis Method    | : BX20423.MTH |
| Report Created on: | 25 Apr 95 04:51 PM                      | Sample Amount      | : 0           |
| Last Recalib on    | : 25 APR 95 04:27 PM                    | ISTD Amount        | :             |
| Multiplier         | : 1                                     |                    |               |
| Sample Info        | : 95-1217; SS-3 9-11; 5 GRAMS SOIL/ext. |                    |               |

Ext *psr*  
mjm

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4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

Client Sample Number : SS-3 9-11  
Lab Sample Number : X05764  
Date Sampled : 4/13/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/26/95  
Date Analyzed : 4/26/95  
% Moisture : 7.69%

Client Project No. : 722450.26020/Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 1250.00  
Method : 8020  
Matrix : Soil/Extract  
Lab File No. : BX2042615  
Method Blank No. : MEB042595

| Compound Name   | Cas Number                        | Sample*<br>Concentration<br>ug/Kg | RL*<br>ug/Kg         |
|---|-----------------------------------|-----------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                                | **                   |
| Toluene   | 108-88-3                          | **                                | **                   |
| Chlorobenzene   | 108-90-7                          | **                                | **                   |
| Ethyl Benzene   | 100-41-4                          | 9600                              | 5400                 |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 43000 B                           | 5400                 |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 16000                             | 5400                 |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 39000                             | 5400                 |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 17000 B                           | 5400                 |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 3400 J                            | 5400                 |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 96%                               | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

\*\* = See BX2042318 for noted values, df = 125.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

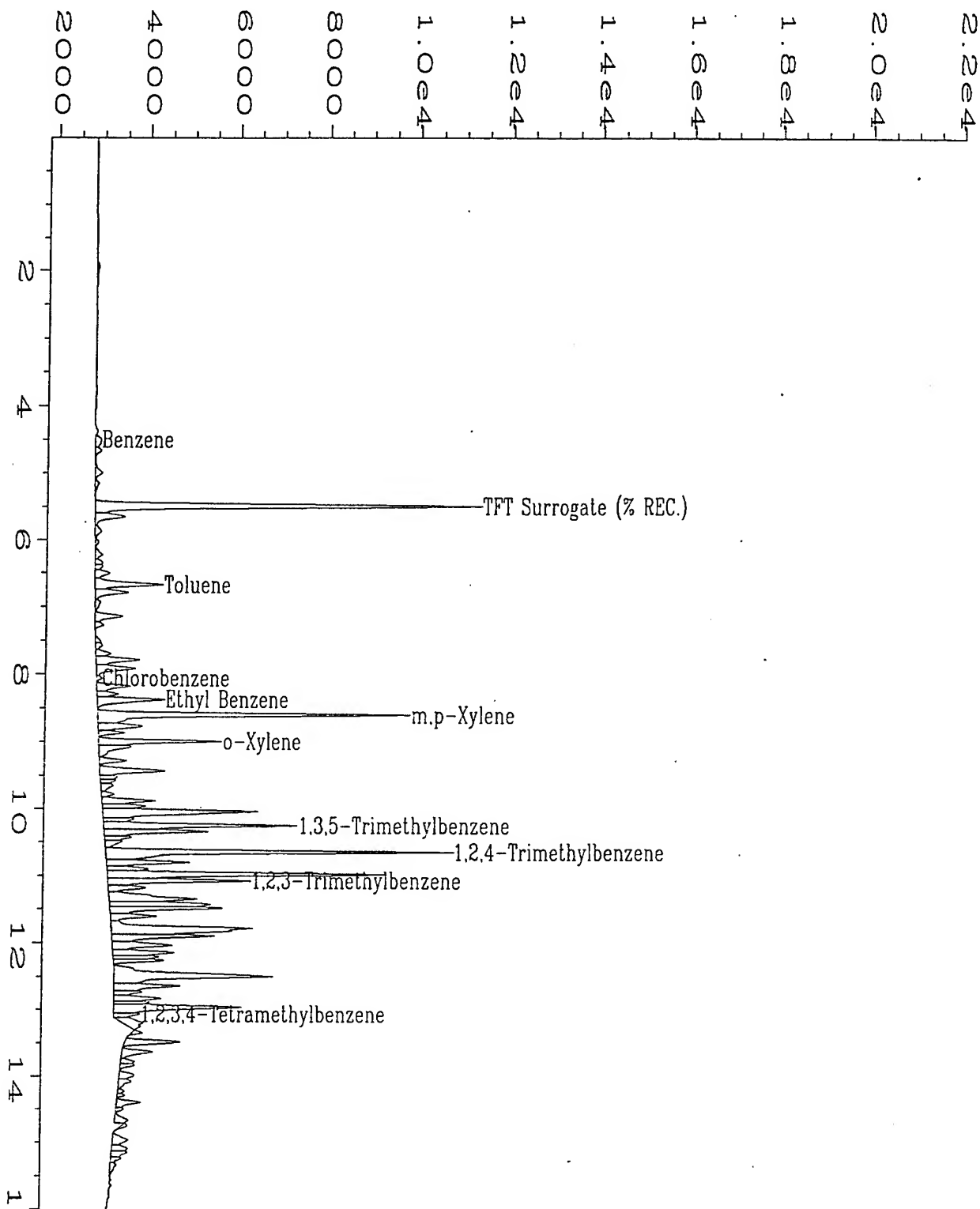
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

*K. Cone*  
Analyst

Approved



Data File Name : C:\HPCHEM\2\DATA\BX20426\015R1001.D  
 Operator : S.W. Tyson  
 Instrument : BTEX2  
 Sample Name : X05764;1250;.01  
 Run Time Bar Code:  
 Acquired on : 26 Apr 95 05:53 PM  
 Report Created on: 26 Apr 95 07:01 PM  
 Last Recalib on : 26 APR 95 02:33 PM  
 Multiplier : 1250  
 Sample Info : PROJECT # 95-1217 CLIENT # SS-1 11.5-13.5 Soil Extract

Page Number : 1  
 Vial Number : 15  
 Injection Number : 1  
 Sequence Line : 10  
 Instrument Method: BX20426.MTH  
 Analysis Method : BX20426.MTH  
 Sample Amount : 0  
 ISTD Amount :

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Method 8020 Data Report

Client Sample Number : SS-1 11.5-13.5Dup  
Lab Sample Number : X05764FD  
Date Sampled : 4/13/95  
Date Received : 4/14/95  
Date Extracted/Prepared : 4/26/95  
Date Analyzed : 4/26/95  
% Moisture : 7.69%

Client Project No. : 722450.26020/Johnson AFB  
Lab Project No. : 95-1217  
Dilution Factor : 2500.00  
Method : 8020  
Matrix : Soil/Extract  
Lab File No. : BX2042616  
Method Blank No. : MEB042595

| Compound Name                                | Cas Number                        | Sample*                |   | RL*<br>ug/Kg         |
|--|-----------------------------------|------------------------|---|----------------------|
|  |                                   | Concentration<br>ug/Kg |   |                      |
| Benzene                                      | 71-43-2                           | 9200                   | J | 11000                |
| Toluene                                      | 108-88-3                          | 8500                   | J | 11000                |
| Chlorobenzene                                | 108-90-7                          | 16000                  |   | 11000                |
| Ethyl Benzene                                | 100-41-4                          | 12000                  |   | 11000                |
| Total Xylenes<br>(m, p & o)                  | 108-38-3, 106-42-3<br>and 95-47-6 | 45000                  | B | 11000                |
| 1,3,5-Trimethylbenzene                       | 108-67-8                          | 54000                  |   | 11000                |
| 1,2,4-Trimethylbenzene                       | 95-63-6                           | 11000                  |   | 11000                |
| 1,2,3-Trimethylbenzene                       | 526-73-8                          | 13000                  | B | 11000                |
| 1,2,3,4-Tetramethylbenzene                   | 488-23-3                          | 16000                  |   | 11000                |
| Surrogate Recovery (α,α,α-Trifluorotoluene): |                                   | 99%                    |   | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\* = Dry weight basis.

QUALIFIERS:

E = Extrapolated value.

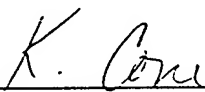
U = Compound analyzed for, but not detected.

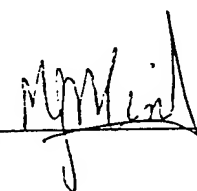
B = Compound also found in the blank.

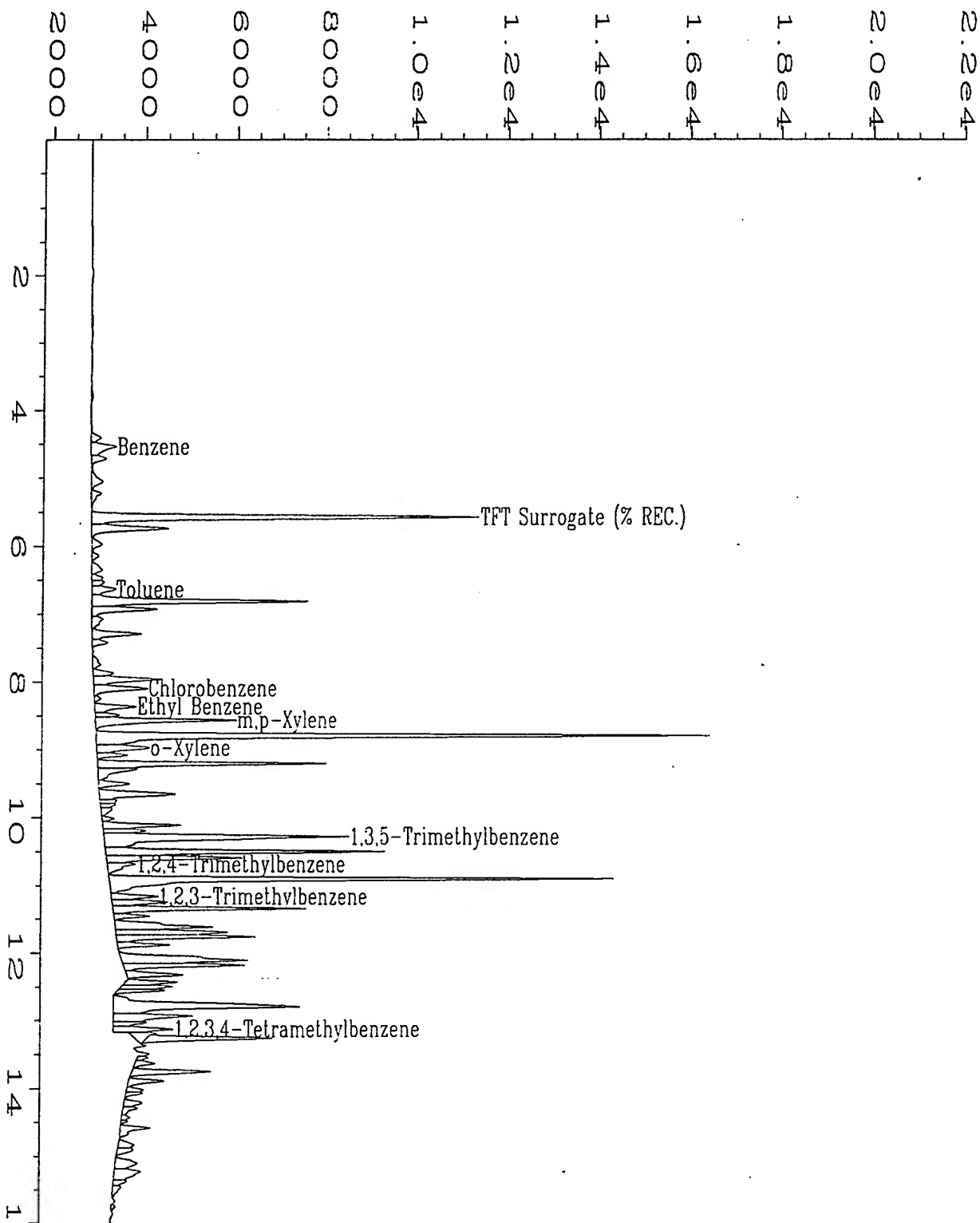
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |  |                   |               |
|--------------------|--|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20426\016R1001.D                    | Page Number       | : 1           |
| Operator           | : S.W. Tyson   | Vial Number       | : 16          |
| Instrument         | : BTEX2  | Injection Number  | : 1           |
| Sample Name        | : X05764DUP;2500;  | Sequence Line     | : 10          |
| Run Time Bar Code: |  | Instrument Method | : BX20426.MTH |
| Acquired on        | : 26 Apr 95 06:31 PM                                     | Analysis Method   | : BX20426.MTH |
| Report Created on: | 26 Apr 95 07:02 PM                                       | Sample Amount     | : 0           |
| Test Recalib on    | : 26 APR 95 02:33 PM                                     | ISTD Amount       | :             |
| Multiplier         | : 2500   |                   |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-1 11.5-13.5 Soil Extract |                   |               |

EPA 602/8020 Matrix Spike/Matrix Spike Duplicate Data Report

Client Sample No. : MW-10 11-12'  
Lab Sample No. : X05758  
Date Sampled : 4/12/95  
Date Received : 4/14/95  
Date Prepared : 4/25/95, 4/20/95  
Date Analyzed : 4/25/95, 4/20/95

Client Project No. : 722450.26020/  
Seymore Johnson  
Lab Project No. : 95-1217  
EPA Method No. : 8020  
Matrix : Soil  
Lab File Number(s) : \*\*  
Method Blank : MB042595, MB042095  
Dilution Factor : 1

| Compound      | Spike Added (ug/Kg) | Sample Concentration (ug/Kg) | Concentration (ug/Kg) |      | Comments   |
|---------------|---------------------|------------------------------|-----------------------|------|------------|
|               |                     |                              | MS                    | MSD  |            |
| Benzene       | 20.0                | 0.0                          | 14.8                  | 15.1 |            |
| Toluene       | 20.0                | 0.0                          | 15.2                  | 14.5 |            |
| Chlorobenzene | 20.0                | 0.0                          | 14.5                  | 14.6 |            |
| Ethylbenzene  | 20.0                | 0.0                          | 14.9                  | 16.2 |            |
| m,p-Xylene    | 40.0                | 0.0                          | 30.3 B                | 31.3 |            |
| o-Xylene      | 20.0                | 0.0                          | 15.0                  | 14.4 |            |
| 1,3,5-TMB     | 20.0                | 0.0                          | 15.1                  | 14.4 |            |
| 1,2,4-TMB     | 20.0                | 0.0                          | 15.1                  | 15.8 |            |
| 1,2,3-TMB     | 20.0                | 0.0                          | 14.7 B                | 13.4 |            |
| 1,2,3,4-TeMB  | 20.0                | 0.0                          | 15.9                  | 14.2 |            |
| Surrogate     | 100.0               | 86%                          | 82%                   | 88%  | % RECOVERY |

| Compound      |  | MS % RECOVERY | MSD % RECOVERY | RPD  | QC# Limits |      |       |
|---------------|--|---------------|----------------|------|------------|------|-------|
|               |  |               |                |      | RPD        | %REC |       |
| Benzene       |  | 74.0          | 75.5           | 2.0  | 25         | 50   | - 150 |
| Toluene       |  | 76.0          | 72.5           | 4.7  | 25         | 50   | - 148 |
| Chlorobenzene |  | 72.5          | 73.0           | 0.7  | 25         | 55   | - 135 |
| Ethylbenzene  |  | 74.5          | 81.0           | 8.4  | 25         | 50   | - 150 |
| m,p-Xylene    |  | 75.8          | 78.3           | 3.2  | 25         | 50   | - 150 |
| o-Xylene      |  | 75.0          | 72.0           | 4.1  | 25         | 50   | - 150 |
| 1,3,5-TMB     |  | 75.5          | 72.0           | 4.7  | 25         | 50   | - 150 |
| 1,2,4-TMB     |  | 75.5          | 79.0           | 4.5  | 25         | 50   | - 150 |
| 1,2,3-TMB     |  | 73.5          | 67.0           | 9.3  | 25         | 50   | - 150 |
| 1,2,3,4-TeMB  |  | 79.5          | 71.0           | 11.3 | 25         | 50   | - 150 |
| Surrogate     |  | 82.0          | 88.0           | NA   | NA         | 50   | - 150 |

# = Values taken from EPA methods 602/8020.

\* = Values outside of QC limits.

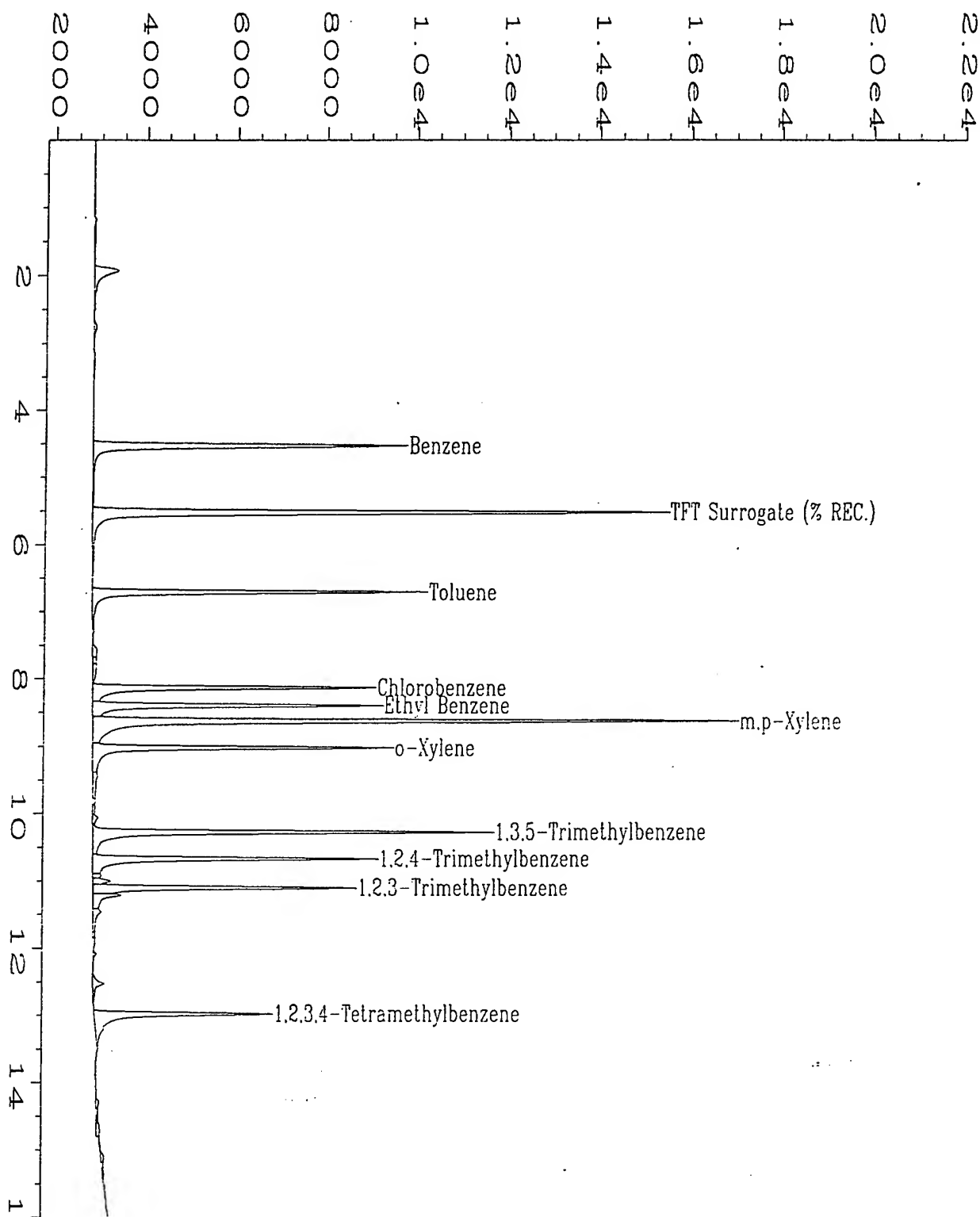
RPD: 0 out of (10) outside limits.

Spike Recovery: 0 out of (20) outside limits.

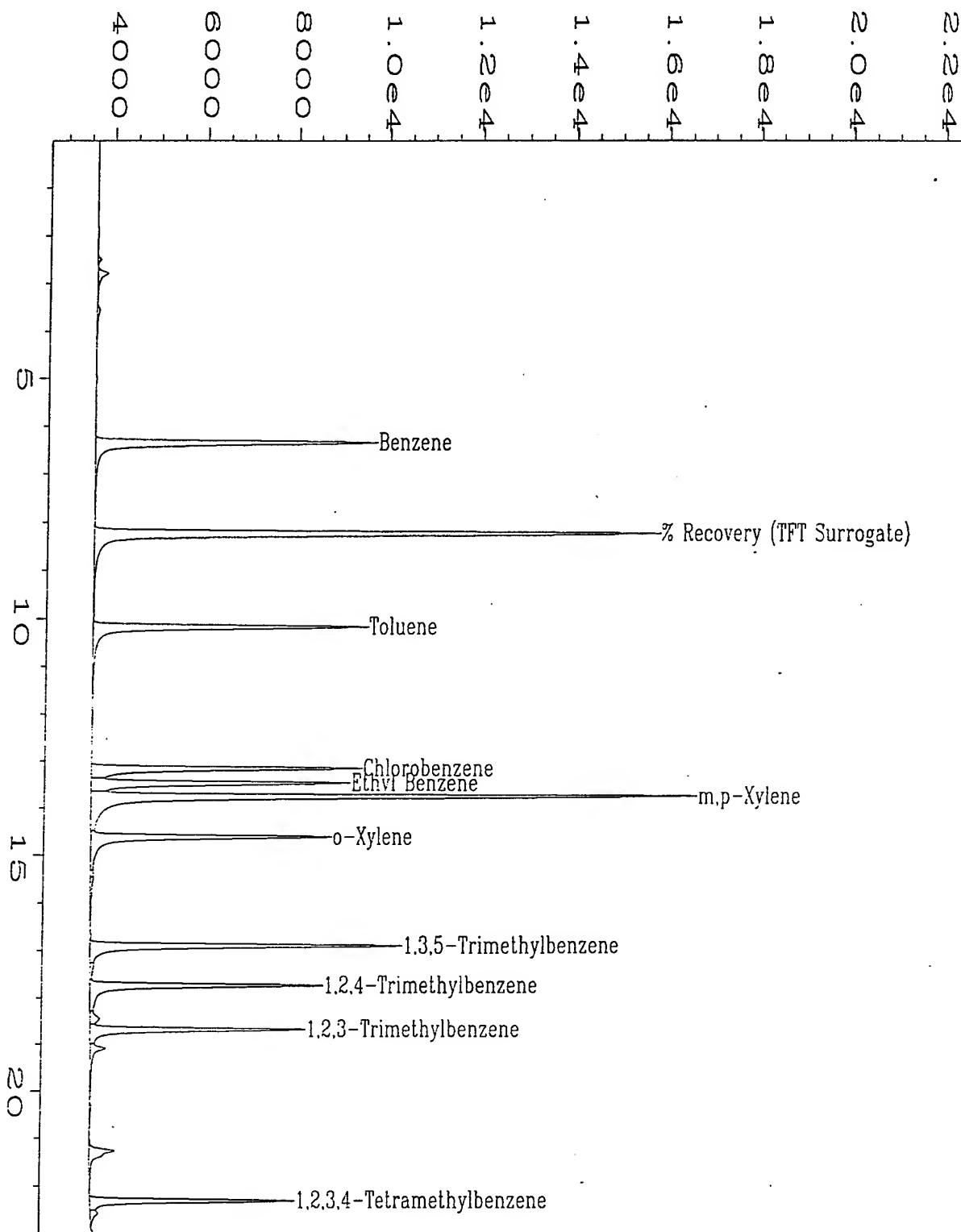
Comments: \*\* = Lab file numbers MS: BX2042514, MSD: BX1042015

*K Cone*  
Analyst

*AmCella*  
Approved



|                    |  |                   |               |
|--------------------|--|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20425\014R0101.D                        | Page Number       | : 1           |
| Operator           | : S.W. Tyson   | Vial Number       | : 14          |
| Instrument         | : BTEX2  | Injection Number  | : 1           |
| Sample Name        | : X05758MS;1;5   | Sequence Line     | : 1           |
| Run Time Bar Code: |  | Instrument Method | : BX20425.MTH |
| Acquired on        | : 25 Apr 95 05:00 PM   | Analysis Method   | : BX20425.MTH |
| Report Created on: | : 12 May 95 06:14 PM   | Sample Amount     | : 0           |
| Last Recalib on    | : 26 APR 95 09:49 AM   | ISTD Amount       | :             |
| Multiplier         | : 1  |                   |               |
| Sample Info        | : Project # 95-1217 Client # MW-10 11'-12' Soil Matrix Spike |                   |               |



|                    |   |                   |               |
|--------------------|---|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\BX10420\015F0701.D                 | Page Number       | : 1           |
| Operator           | : SW Tyson  | Vial Number       | : 15          |
| Instrument         | : BTEX1   | Injection Number  | : 1           |
| Sample Name        | : X05758MSD;1;5                                       | Sequence Line     | : 7           |
| Run Time Bar Code: |   | Instrument Method | : BX10420.MTH |
| Acquired on        | : 20 Apr 95 06:32 PM                                  | Analysis Method   | : BX10420B.MT |
| Report Created on: | 21 Apr 95 12:41 PM                                    | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 12:15 PM                                  | ISTD Amount       | :             |
| Multiplier         | : 1   |                   |               |
| Sample Info        | : Project # 95-1217 Client # MW-10 11-12' Spike Dupl. |                   |               |

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |              |
|-------------------------|-------------|-----------------|--------------|
| LCS Number              | : LCS042095 | Dilution Factor | : 1.00       |
| Date Extracted/Prepared | : 4/20/95   | Method          | : 602        |
| Date Analyzed           | : 4/20/95   | Matrix          | : Water      |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX10420008 |

| Compound Name   | Cas<br>Number | LCS<br>Concentration<br>ug/L | LCS<br>%<br>Recovery | QC Limit<br>% Recovery |
|---|---------------|------------------------------|----------------------|------------------------|
| Benzene   | 71-43-2       | 16.7                         | 83.5                 | 71.0-119.0*            |
| Toluene   | 108-88-3      | 16.4                         | 82.0                 | 73.0-111.0*            |
| Chlorobenzene   | 108-90-7      | 17.1                         | 85.5                 | 64.0-119.0*            |
| Ethyl Benzene   | 100-41-4      | 18.8                         | 94.0                 | 75.0-114.0*            |
| m,p-Xylene  | 108-38-3      | 18.5                         | 92.5                 | 75.0-114.0*            |
|   | 106-42-3      |                              |                      |                        |
| o-Xylene  | 95-47-6       | 16.2                         | 81.0                 | 64.0-119.0*            |
| 1,3,5-Trimethylbenzene  | 108-67-8      | 18.1                         | 90.5                 | 50.0-150.0             |
| 1,2,4-Trimethylbenzene  | 95-63-6       | 20.1                         | 100.5                | 50.0-150.0             |
| 1,2,3-Trimethylbenzene  | 526-73-8      | 19.6                         | 98.0                 | 50.0-150.0             |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3      | 18.1                         | 90.5                 | 50.0-150.0             |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |               | 102%                         | 70%-130% (QC limits) |                        |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

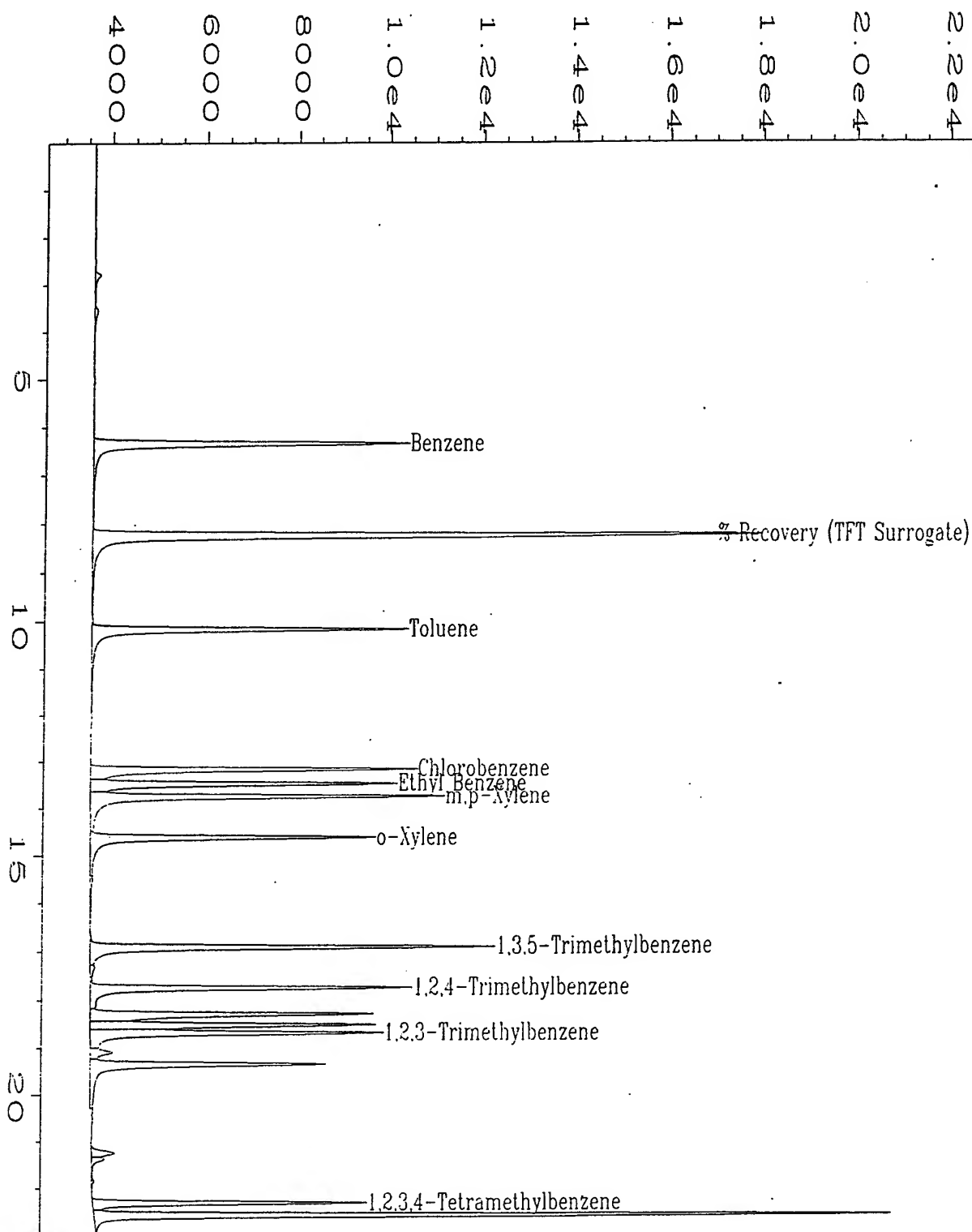
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected,\*but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

Analyst

Approved



Data File Name : D:\1\DATA\BX10420\008F0701.D  
 Operator : SW Tyson  
 Instrument : BTEX1  
 Sample Name : LCS042095  
 Run Time Bar Code:  
 Acquired on : 20 Apr 95 01:56 PM  
 Report Created on: 15 May 95 10:31 AM  
 Last Recalib on : 21 APR 95 12:15 PM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 8  
 Injection Number : 1  
 Sequence Line : 7  
 Instrument Method: BX10420.MT  
 Analysis Method : BX10420B.MT  
 Sample Amount : 0  
 ISTD Amount :

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |             |
|-------------------------|-------------|-----------------|-------------|
| LCS Number              | : LCS042295 | Dilution Factor | : 1.00      |
| Date Extracted/Prepared | : 4/22/95   | Method          | : 602       |
| Date Analyzed           | : 4/22/95   | Matrix          | : Water     |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX2042210 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 19.0                   | 95.0                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 19.4                   | 97.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 20.3                   | 102                  | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 19.9                   | 99.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 18.7                   | 93.5                 | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 19.7                   | 98.5                 | 64.0-119.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 20.9                   | 105                  | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 19.4                   | 97.0                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 21.3                   | 107                  | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 18.5                   | 92.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 98%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value


U = Compound analyzed for, but not detected.

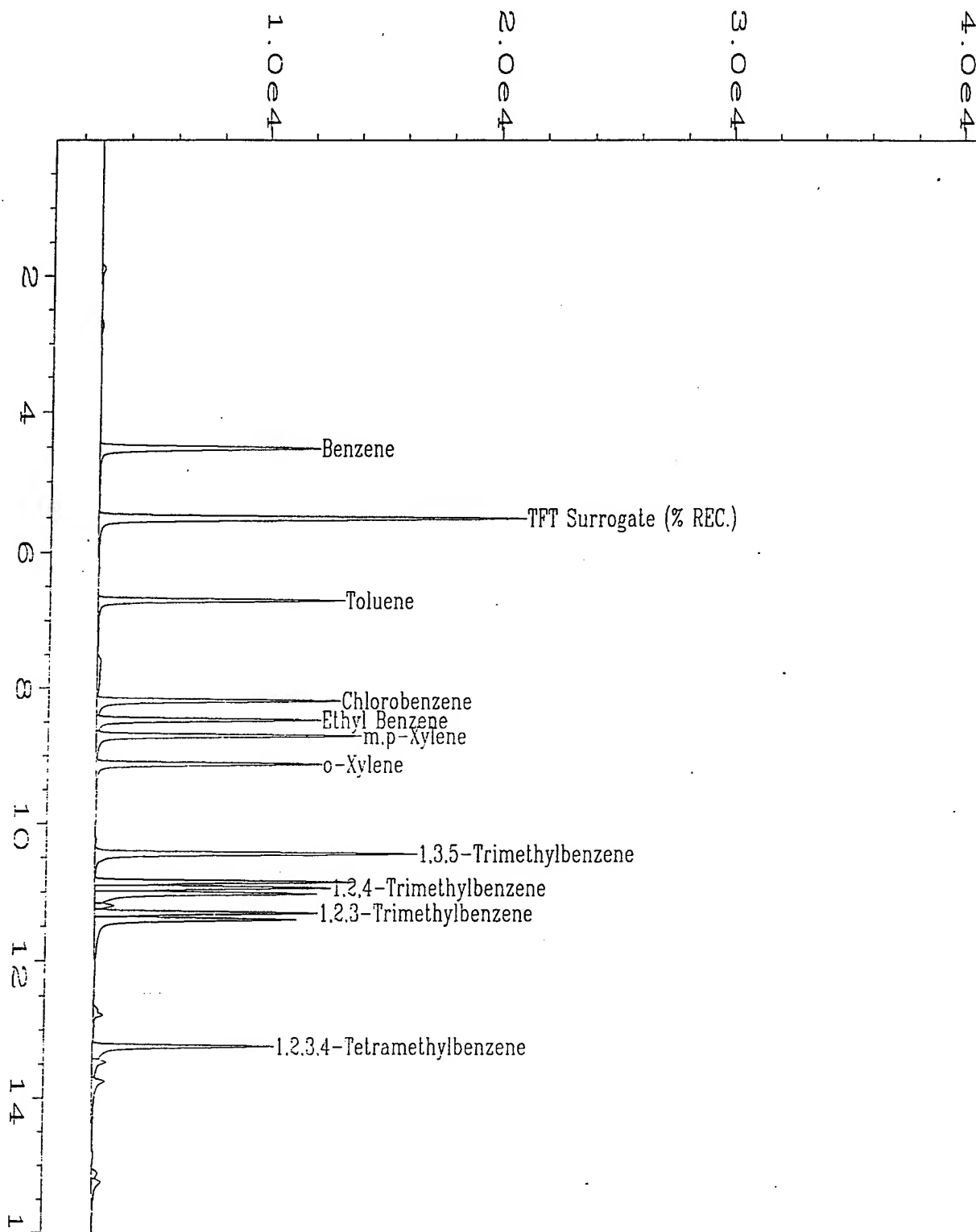
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

  
Analyst

  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20422\010R1001.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 10          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : LCS042295                           | Sequence Line     | : 10          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20422.MTH |
| Acquired on        | : 22 Apr 95 03:15 PM                  | Analysis Method   | : BX20422.MTH |
| Report Created on: | 24 Apr 95 06:36 PM                    | Sample Amount     | : 0           |
| Last Recalib on    | : 24 APR 95 06:19 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

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BTEX Data Report  
Laboratory Control Sample (LCS)

LCS Number : LCS042395 Dilution Factor : 1.00  
Date Extracted/Prepared : 4/23/95 Method : 602  
Date Analyzed : 4/23/95 Matrix : Water  
Spike Amount (ug/L) : 20.0 Lab File No. : BX20423009

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 18.0                   | 90.0                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 18.2                   | 91.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 18.6                   | 93.0                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 18.8                   | 94.0                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 20.0                   | 100                  | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 18.4                   | 92.0                 | 64.0-119.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 18.1                   | 90.5                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 19.1                   | 95.5                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 20.8                   | 104                  | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 103%                   | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

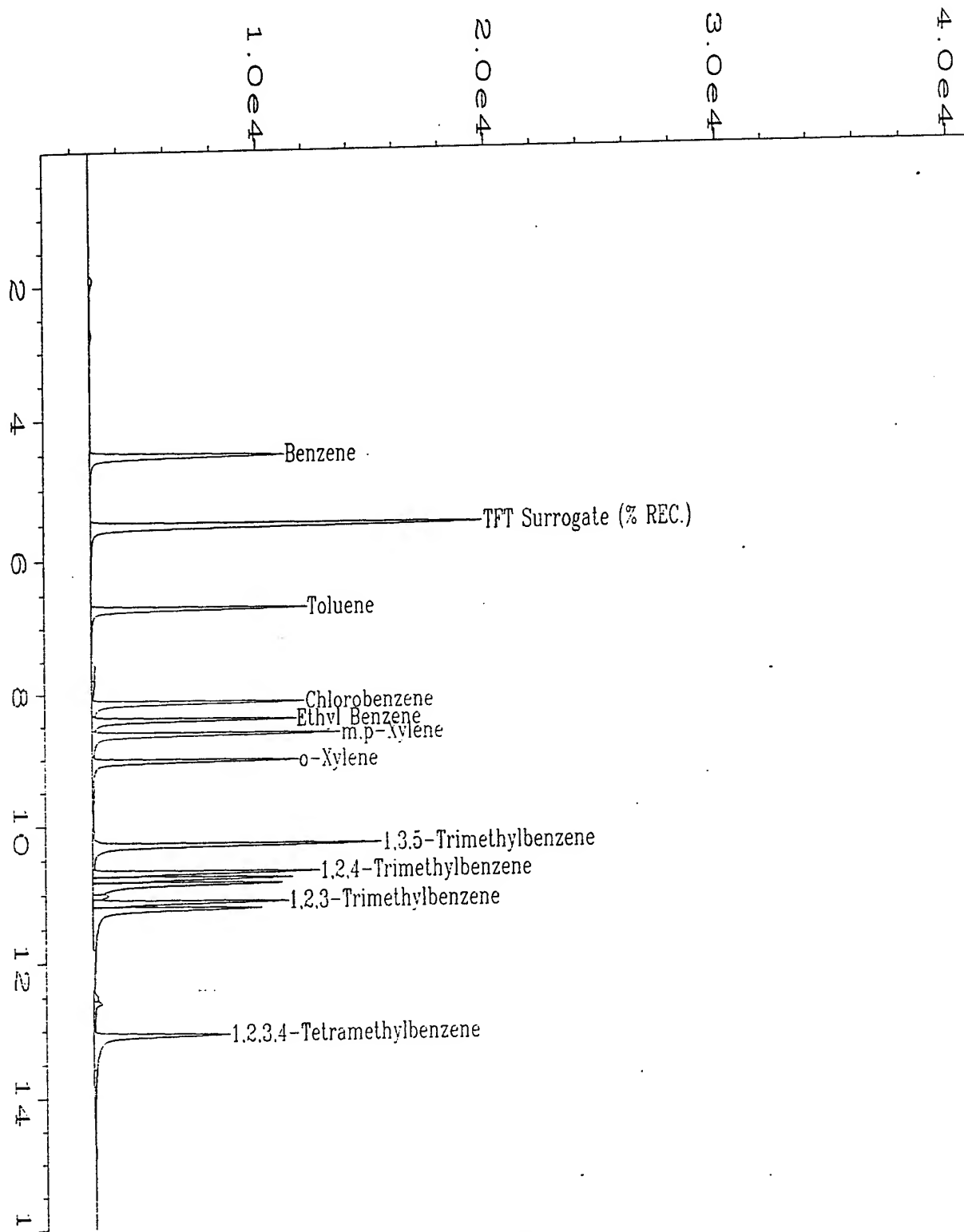
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

Analyst

Approved



Data File Name : D:\2\DATA\BX20423\009R0901.D  
 Operator : T.Lockwood  
 Instrument : BTEX2  
 Sample Name : LCS042395  
 Run Time Bar Code:  
 Acquired on : 23 Apr 95 01:38 PM  
 Report Created on: 15 May 95 10:37 AM  
 Last Recalib on : 25 APR 95 04:27 PM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 9  
 Injection Number : 1  
 Sequence Line : 9  
 Instrument Method: BX20423.MTH  
 Analysis Method : BX20423.MTH  
 Sample Amount : 0  
 ISTD Amount :

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BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |             |
|-------------------------|-------------|-----------------|-------------|
| LCS Number              | : LCS042595 | Dilution Factor | : 1.00      |
| Date Extracted/Prepared | : 4/25/95   | Method          | : 602       |
| Date Analyzed           | : 4/25/95   | Matrix          | : Water     |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX2042510 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 16.9                   | 84.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 17.7                   | 88.5                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 18.2                   | 91.0                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 18.6                   | 93.0                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 20.0                   | 100.0                | 75.0-114.0*         |
| o-Xylene  | 106-42-3   |                        |                      |                     |
|   | 95-47-6    | 18.3                   | 91.5                 | 64.0-119.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 20.8                   | 104.0                | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 19.7                   | 98.5                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 22.5                   | 112.5                | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 96%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

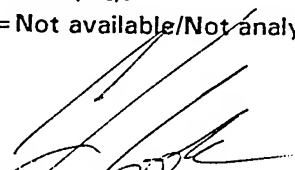
E = Extrapolated value

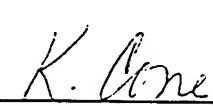
U = Compound analyzed for, but not detected.

B = Compound found in blank and sample. Compare blank and sample data.

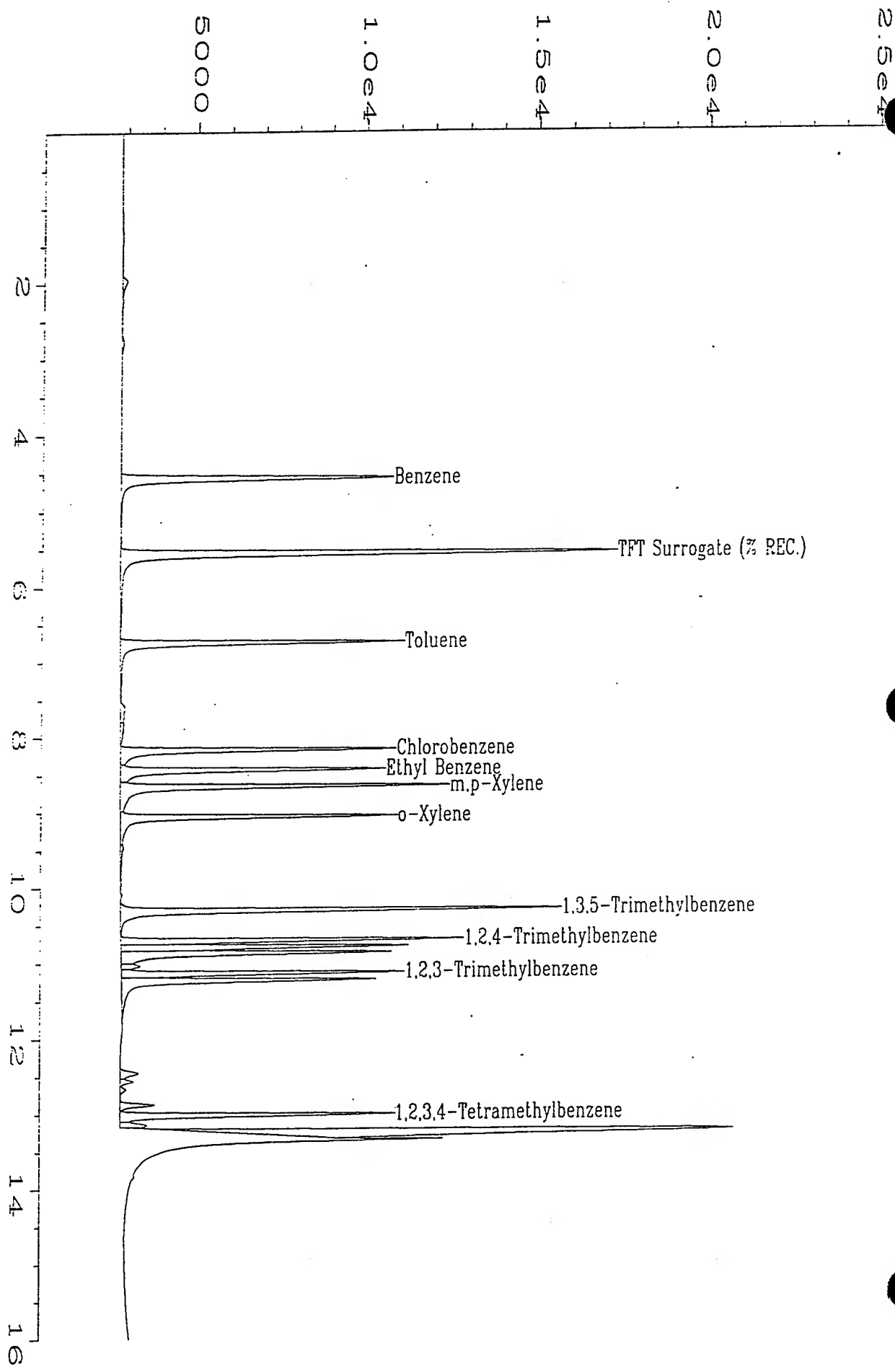
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

  
Analyst

  
Approved

Sig. 2 in C:\NHP\CHEM\2\DATA\BX20425\010R0101.D



EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

LCS Number : LCS042695 Dilution Factor : 1.00  
Date Extracted/Prepared : 4/26/95 Method : 602  
Date Analyzed : 4/26/95 Matrix : Water  
Spike Amount (ug/L) : 20.0 Lab File No. : BX2042610

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 18.3                   | 91.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 19.0                   | 95.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 19.4                   | 97                   | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 19.5                   | 97.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 21.4                   | 107                  | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 19.2                   | 96.0                 | 64.0-119.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 21.7                   | 109                  | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 20.3                   | 102                  | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 20.5                   | 103                  | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 19.7                   | 98.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 104%                   | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

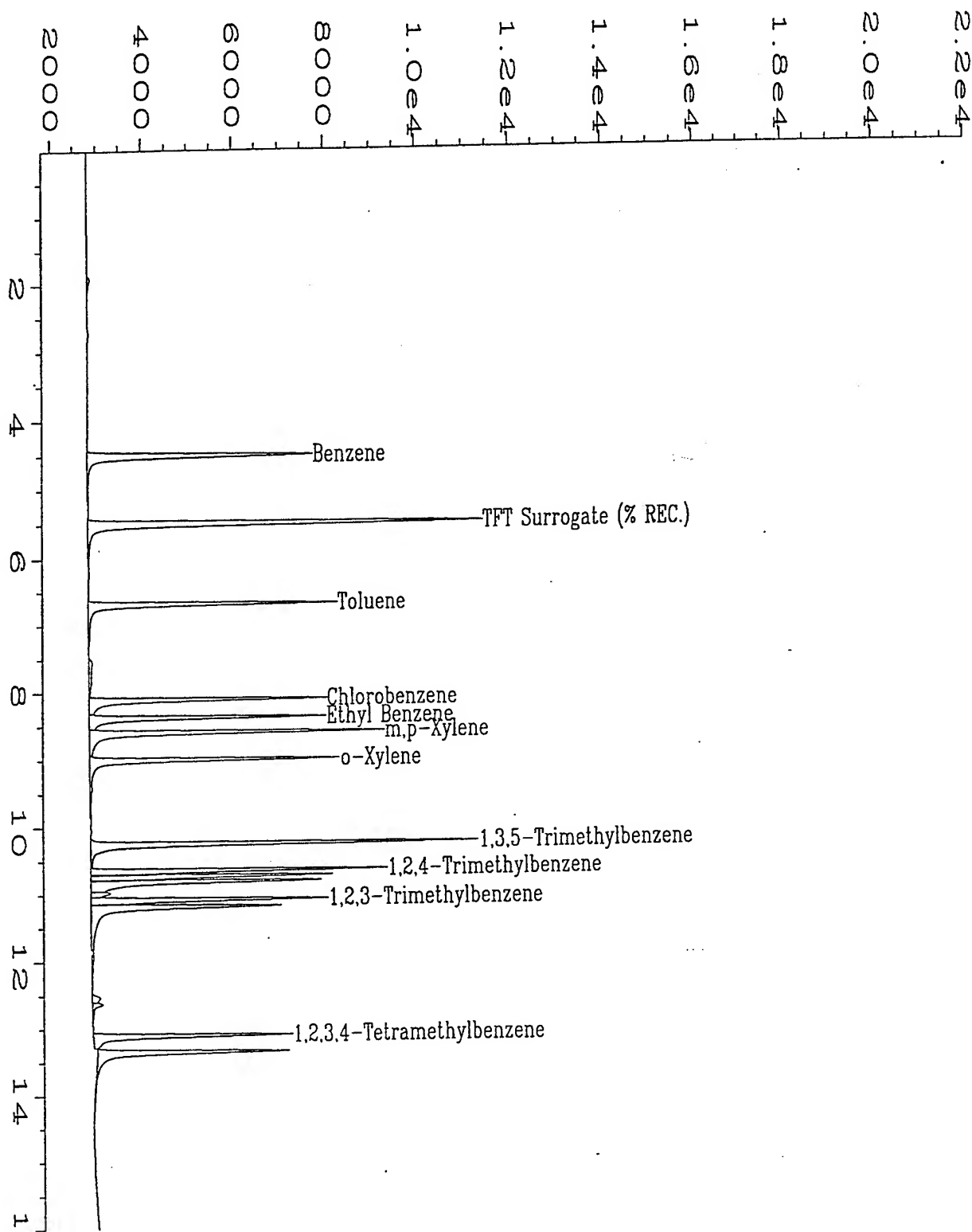
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

Analyst

Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20426\010R1001.D | Page Number       | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number       | : 10          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : LCS042695                           | Sequence Line     | : 10          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20426.MTH |
| Acquired on        | : 26 Apr 95 02:41 PM                  | Analysis Method   | : BX20426.MTH |
| Report Created on  | : 26 Apr 95 06:59 PM                  | Sample Amount     | : 0           |
| Recalib on         | : 26 APR 95 02:33 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : REF # 1667 - New LCS Mix            |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

LCS Number : LCS042695 Dilution Factor : 1.00  
Date Extracted/Prepared : 4/26/95 Method : 602  
Date Analyzed : 4/26/95 Matrix : Water  
Spike Amount (ug/L) : 20.0 Lab File No. : BX2042610

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 18.3                   | 91.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 19.0                   | 95.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 19.4                   | 97                   | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 19.5                   | 97.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 21.4                   | 107                  | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 19.2                   | 96.0                 | 64.0-119.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 21.7                   | 109                  | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 20.3                   | 102                  | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 20.5                   | 103                  | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 19.7                   | 98.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 104%                   | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

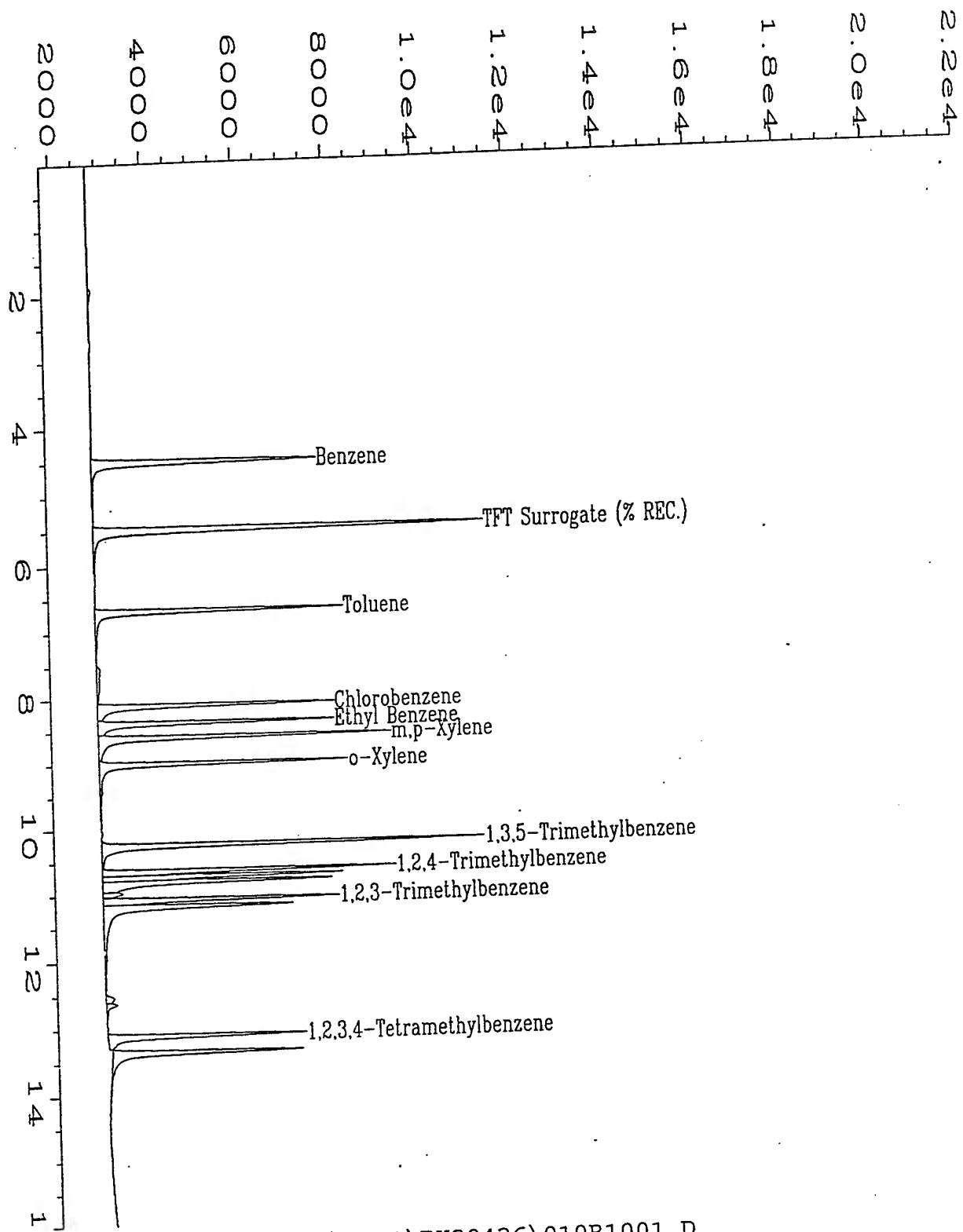
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

Analyst

Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20426\010R1001.D | Page Number       | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number       | : 10          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : LCS042695                           | Sequence Line     | : 10          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20426.MTH |
| Acquired on        | : 26 Apr 95 02:41 PM                  | Analysis Method   | : BX20426.MTH |
| Report Created on: | : 26 Apr 95 06:59 PM                  | Sample Amount     | : 0           |
| Int Recalib on     | : 26 APR 95 02:33 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : REF # 1667 - New LCS Mix            |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH-GASOLINE)

|               |              |                       |                          |
|---------------|--------------|-----------------------|--------------------------|
| Date Sampled  | : 4/12,13/95 | Client Project Number | : 722450.26020/SEYMORE   |
| Date Received | : 4/14/95    | Lab Project Number    | : 95-1217                |
| Date Prepared | : 4/26,27/95 | Matrix                | : Soil                   |
| Date Analyzed | : 4/26,27/95 | Method Number         | : EPA 5030/8015 Modified |

| Evergreen<br>Sample # | Client<br>Sample # | Surrogate<br>Recovery | TVH*<br>mg/Kg | RL*<br>mg/Kg |
|-----------------------|--------------------|-----------------------|---------------|--------------|
| MB042695              | METHOD BLANK       | 100%                  | U             | 0.1          |
| X05753                | MW-6 15-16'        | 86%                   | U             | 0.13         |
| X05755                | MW-8 11-12'        | 97%                   | U             | 0.13         |
| X05756                | MW-9 15-16'        | 81%                   | U             | 0.12         |
| X05757                | MW-10 10-11'       | 88%                   | U             | 0.13         |
| X05759                | MW-11 11.5 13.5    | 83%                   | U             | 0.13         |
| X05760C               | SS-1 11.5-13.5     | **                    | 1000 E        | 5.5          |
| X05760G               | SS-1 11.5-13.5 DUP | **                    | 6600 E        | 5.5          |
| X05762                | SS-1 16'-18'       | 94%                   | U             | 0.11         |
| X05762 DUP            | SS-1 16'-18'       | 86%                   | U             | 0.11         |
| X05763                | SS-2 11.5-13.5     | 105%                  | 1.9           | 0.11         |
| X05764C               | SS-3 9-11          | **                    | 5200 E        | 5.4          |
| X05764G               | SS-3 9-11 DUP      | **                    | 2300 E        | 5.4          |

QUALIFIERS

U = TVH analyzed for but not detected.


B = TVH found in blank also.


E = Extrapolated value.

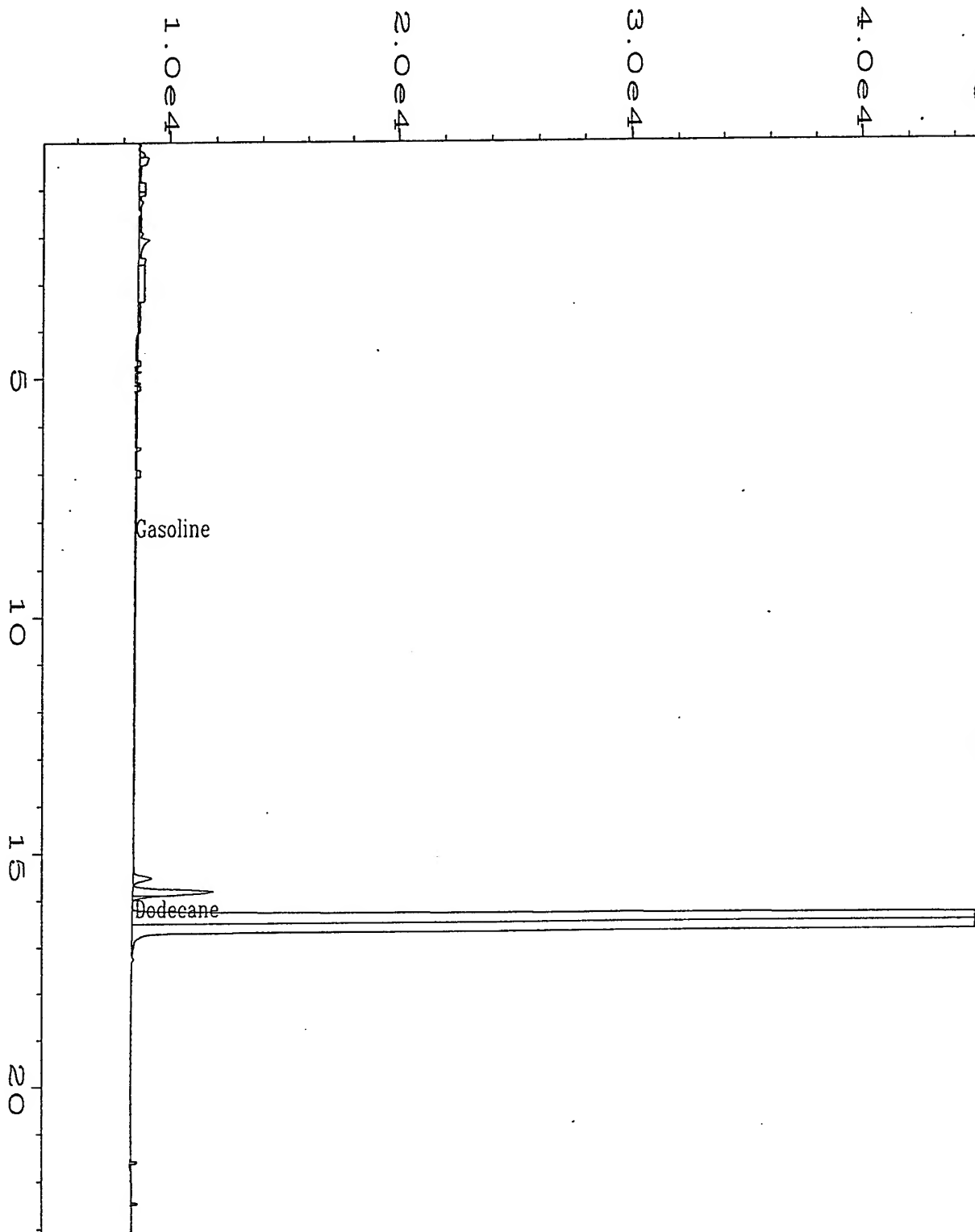
RL = Reporting Limit.

\* = Based on dry-weight.

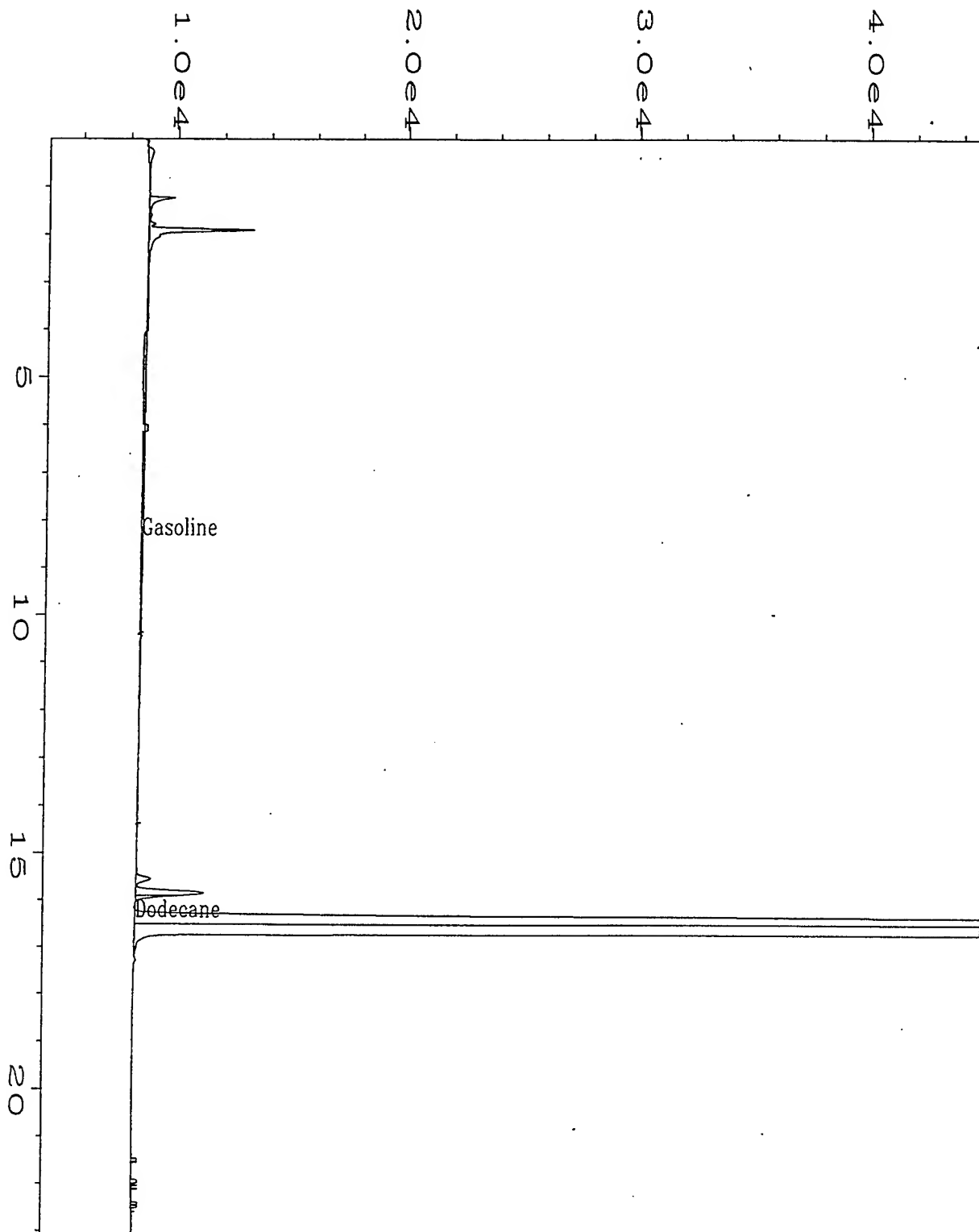
\*\* = Unable to separate surrogate from analyte.

  
Analyst

  
Approved

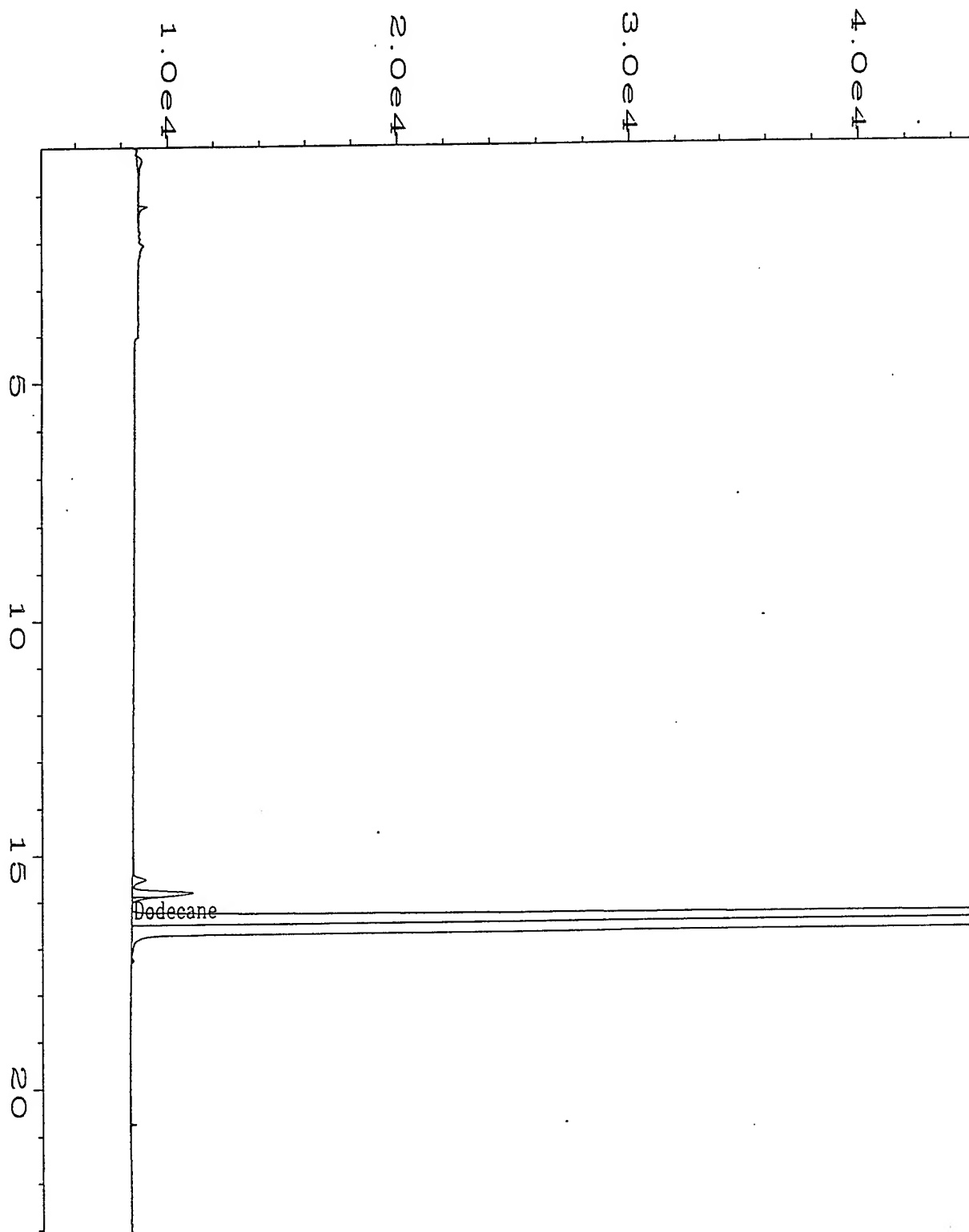


|                    |                                       |                    |            |
|--------------------|---------------------------------------|--------------------|------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0426\009F0101.D | Page Number        | : 1        |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 9        |
| Instrument         | : TVH                                 | Injection Number   | : 1        |
| Sample Name        | : MB042695                            | Sequence Line      | : 1        |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BAS M  |
| Acquired on        | : 26 Apr 95 06:46 PM                  | Analysis Method    | : TVH042 T |
| Port Created on:   | 26 Apr 95 07:12 PM                    | Sample Amount      | : 0        |
| Last Recalib on    | : 26 APR 95 06:00 PM                  | ISTD Amount        | :          |
| Multiplier         | : 1                                   |                    |            |

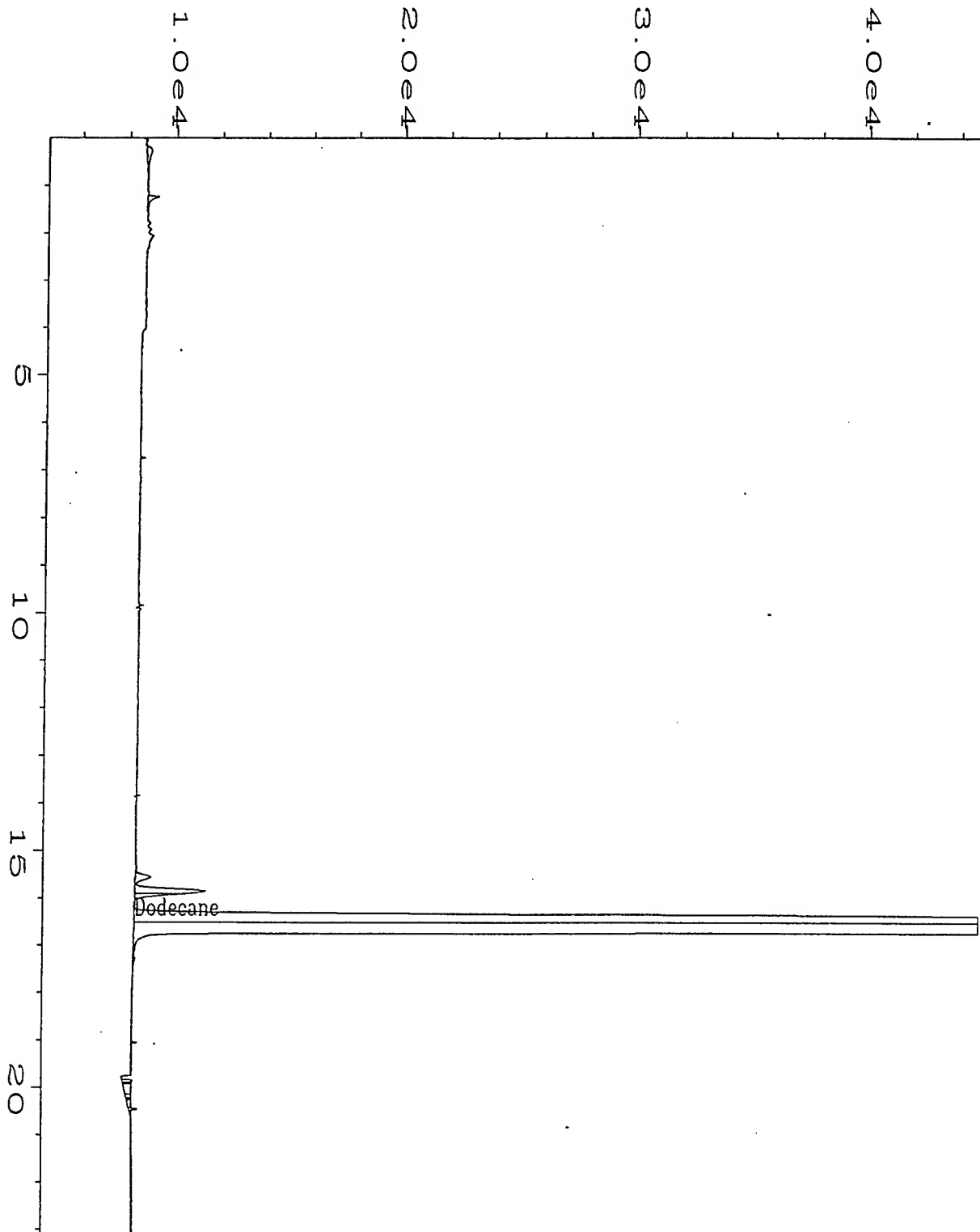


|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0426\010F0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 10           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05753;1;5                          | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 26 Apr 95 07:22 PM                  | Analysis Method   | : TVH0426.MTH  |
| Report Created on: | 27 Apr 95 10:27 AM                    | Sample Amount     | : 0            |
| Last Recalib on    | : 26 APR 95 06:00 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

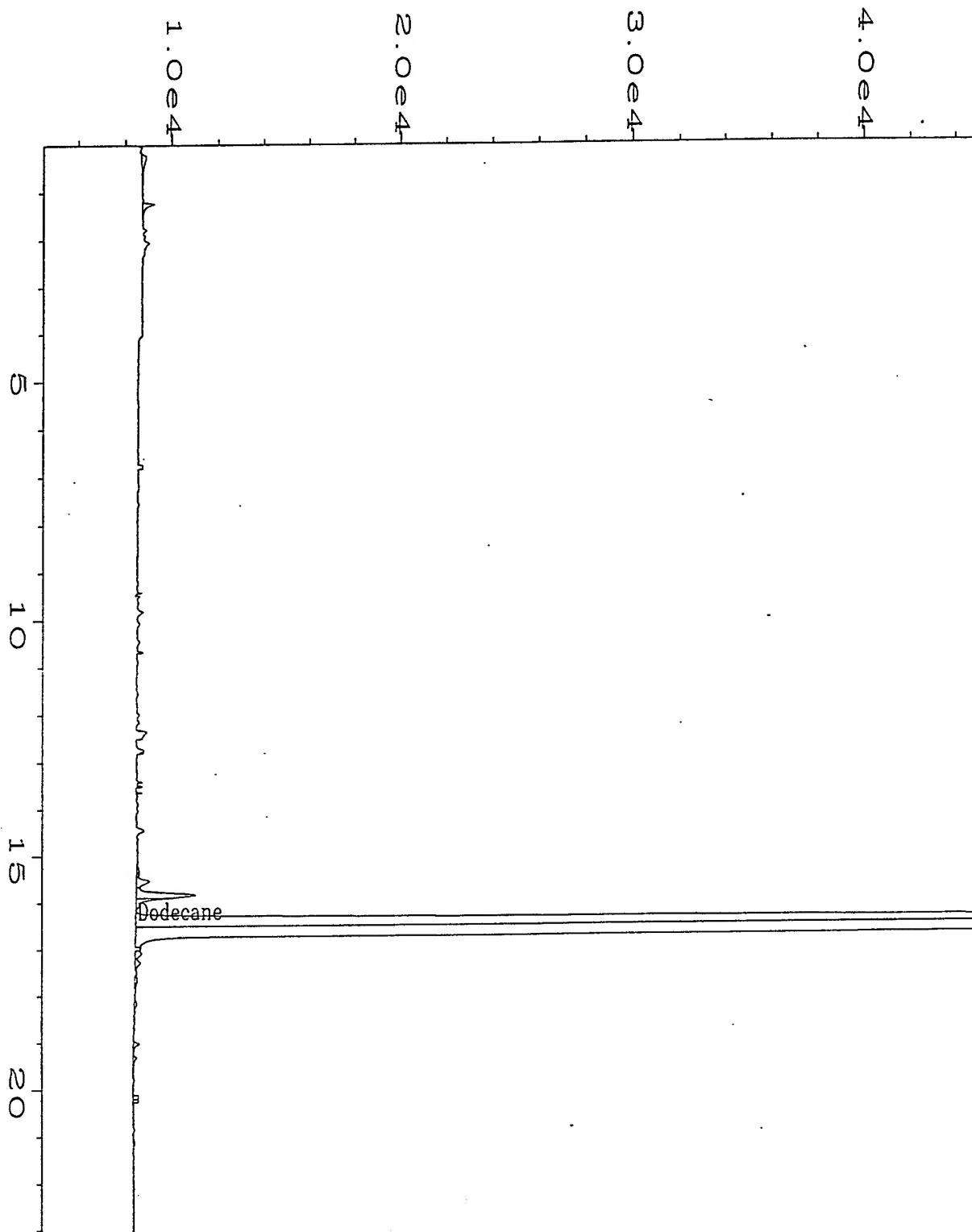
MW-6 15.16'



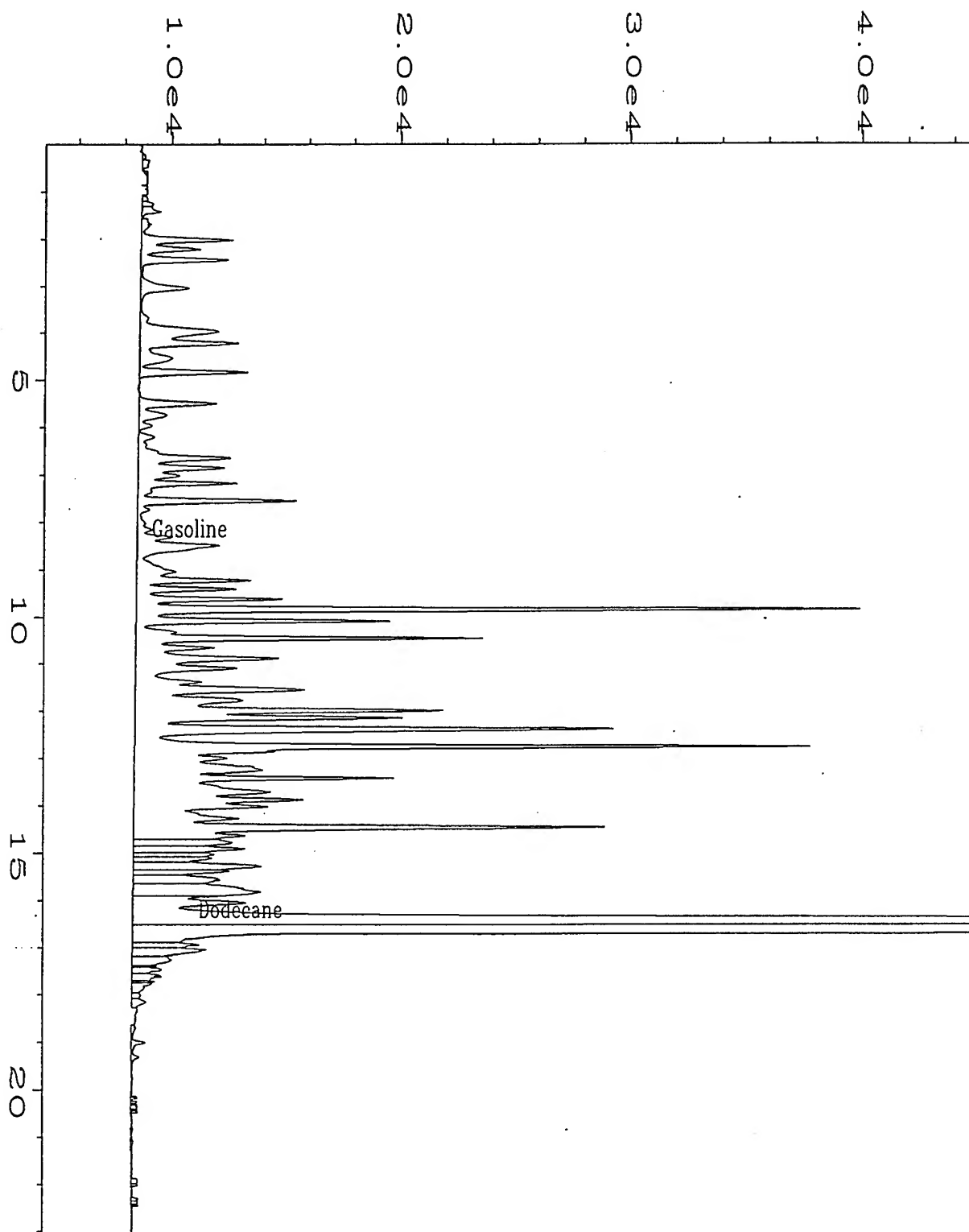
|                    |   |                    |            |
|--------------------|---|--------------------|------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\011F0101.D         | Page Number        | : 1        |
| Operator           | : Dawn N. Guildner                            | Vial Number        | : 11       |
| Instrument         | : TVH   | Injection Number   | : 1        |
| Sample Name        | : X05755;1;5                                  | Sequence Line      | : 1        |
| Run Time Bar Code: |   | Instrument Method: | TVH1BASE.M |
| Acquired on        | : 26 Apr 95 07:58 PM                          | Analysis Method    | : TVH042.M |
| Report Created on: | 27 Apr 95 10:20 AM                            | Sample Amount      | : 0        |
| Last Recalib on    | : 26 APR 95 06:00 PM                          | ISTD Amount        | :          |
| Multiplier         | : 1   |                    |            |
| Sample Info        | : PROJECT # 95-1217 CLIENT # MW-8 11-12' SOIL |                    |            |



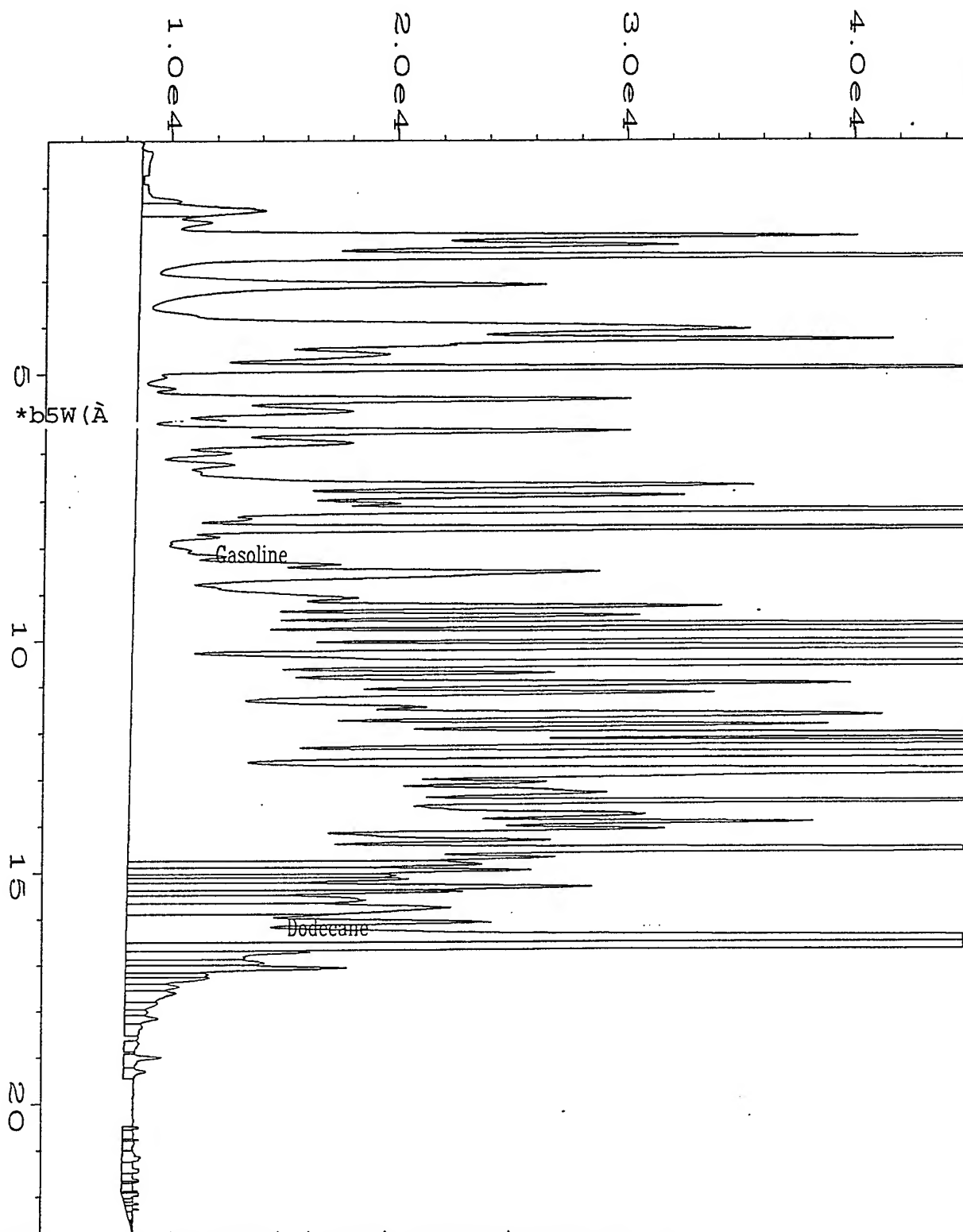
|                    |   |                    |               |
|--------------------|---|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\012F0101.D         | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                            | Vial Number        | : 12          |
| Instrument         | : TVH   | Injection Number   | : 1           |
| Sample Name        | : X05756;1;5                                  | Sequence Line      | : 1           |
| Run Time Bar Code: |   | Instrument Method: | TVH1BASE.MTH  |
| Acquired on        | : 26 Apr 95 08:34 PM                          | Analysis Method    | : TVH0426.MTH |
| Report Created on: | 27 Apr 95 10:20 AM                            | Sample Amount      | : 0           |
| Last Recalib on    | : 26 APR 95 06:00 PM                          | ISTD Amount        | :             |
| Multiplier         | : 1   |                    |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # MW-9 15-16' SOIL |                    |               |



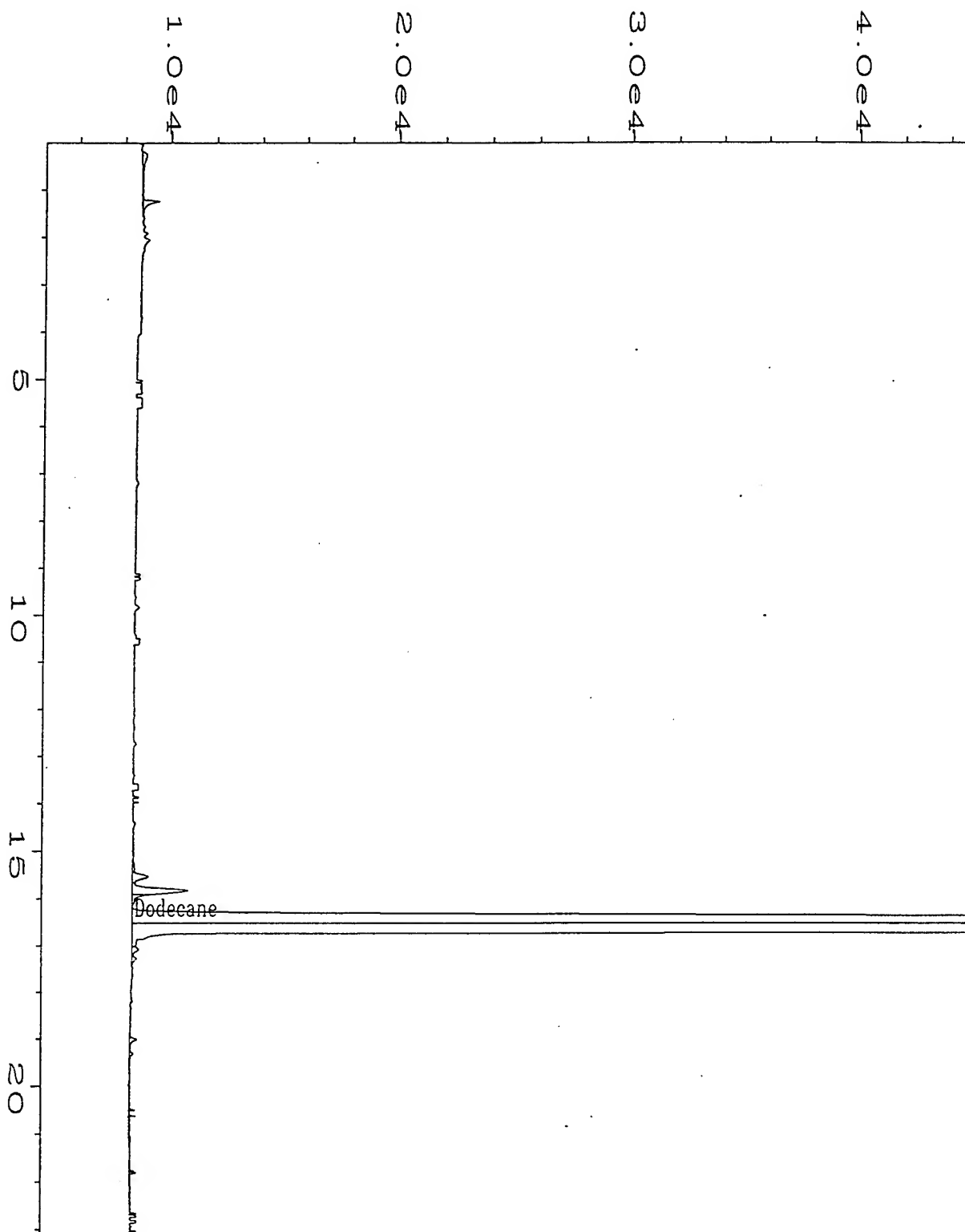
|                    |   |                    |            |
|--------------------|---|--------------------|------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\014F0101.D             | Page Number        | : 1        |
| Operator           | : Dawn N. Guildner                                | Vial Number        | : 14       |
| Instrument         | : TVH   | Injection Number   | : 1        |
| Sample Name        | : X05759;1;5                                      | Sequence Line      | : 1        |
| Run Time Bar Code: |   | Instrument Method: | TVH1BASE.M |
| Acquired on        | : 26 Apr 95 09:46 PM                              | Analysis Method    | : TVH042.T |
| Report Created on: | 27 Apr 95 10:20 AM                                | Sample Amount      | : 0        |
| Last Recalib on    | : 26 APR 95 06:00 PM                              | ISTD Amount        | :          |
| Multiplier         | : 1   |                    |            |
| Sample Info        | : PROJECT # 95-1217 CLIENT # MW-11 11.5-13.5 SOIL |                    |            |



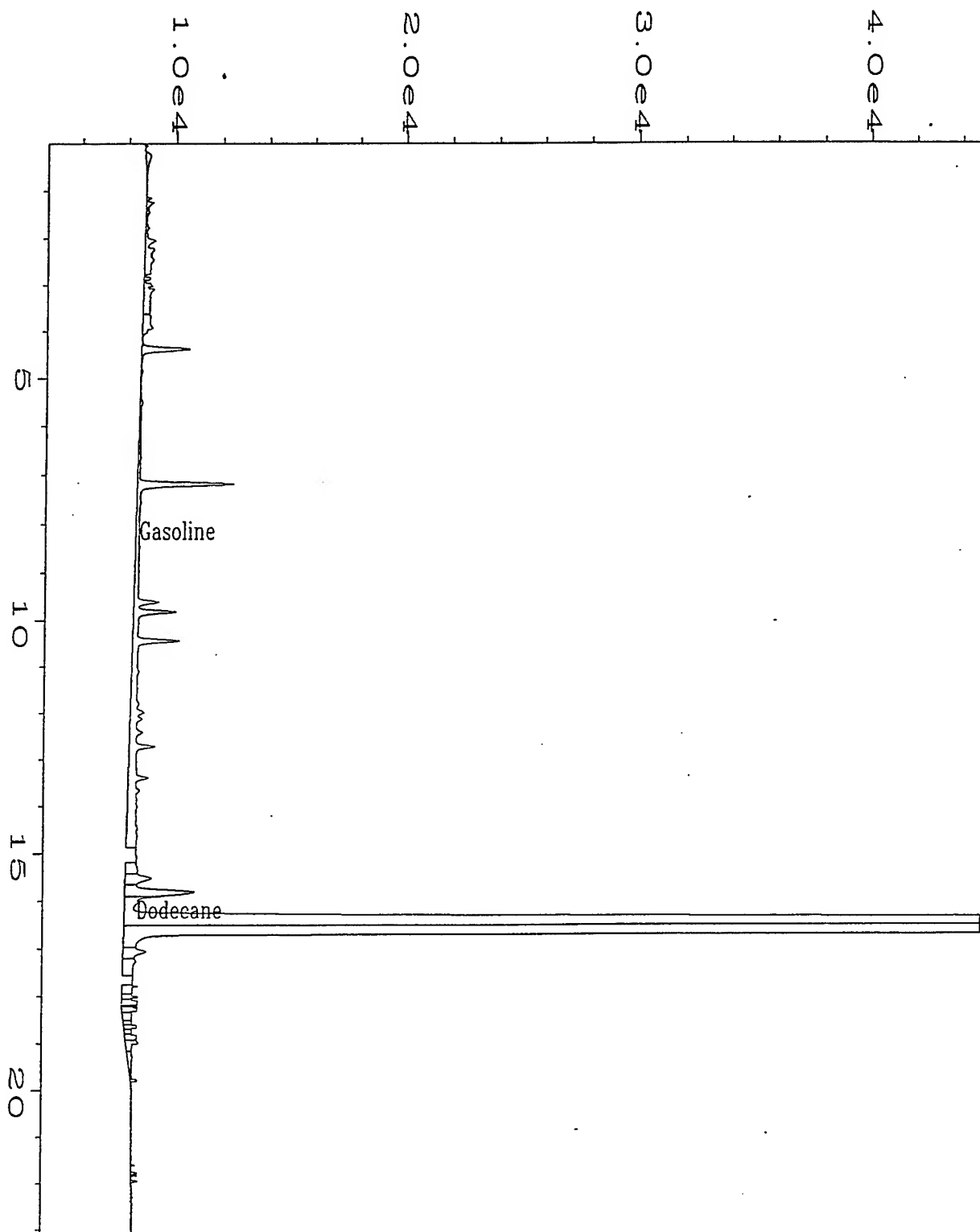
|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\017F0101.D            | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                               | Vial Number       | : 17           |
| Instrument         | : TVH  | Injection Number  | : 1            |
| Sample Name        | : X05760C;50;.1                                  | Sequence Line     | : 1            |
| Run Time Bar Code: |  | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 26 Apr 95 11:34 PM                             | Analysis Method   | : TVH0426.MTH  |
| Report Created on: | : 27 Apr 95 10:21 AM                             | Sample Amount     | : 0            |
| Last Recalib on    | : 26 APR 95 06:00 PM                             | ISTD Amount       | :              |
| Multiplier         | : 50   |                   |                |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-1 11.5-13.5 SOIL |                   |                |



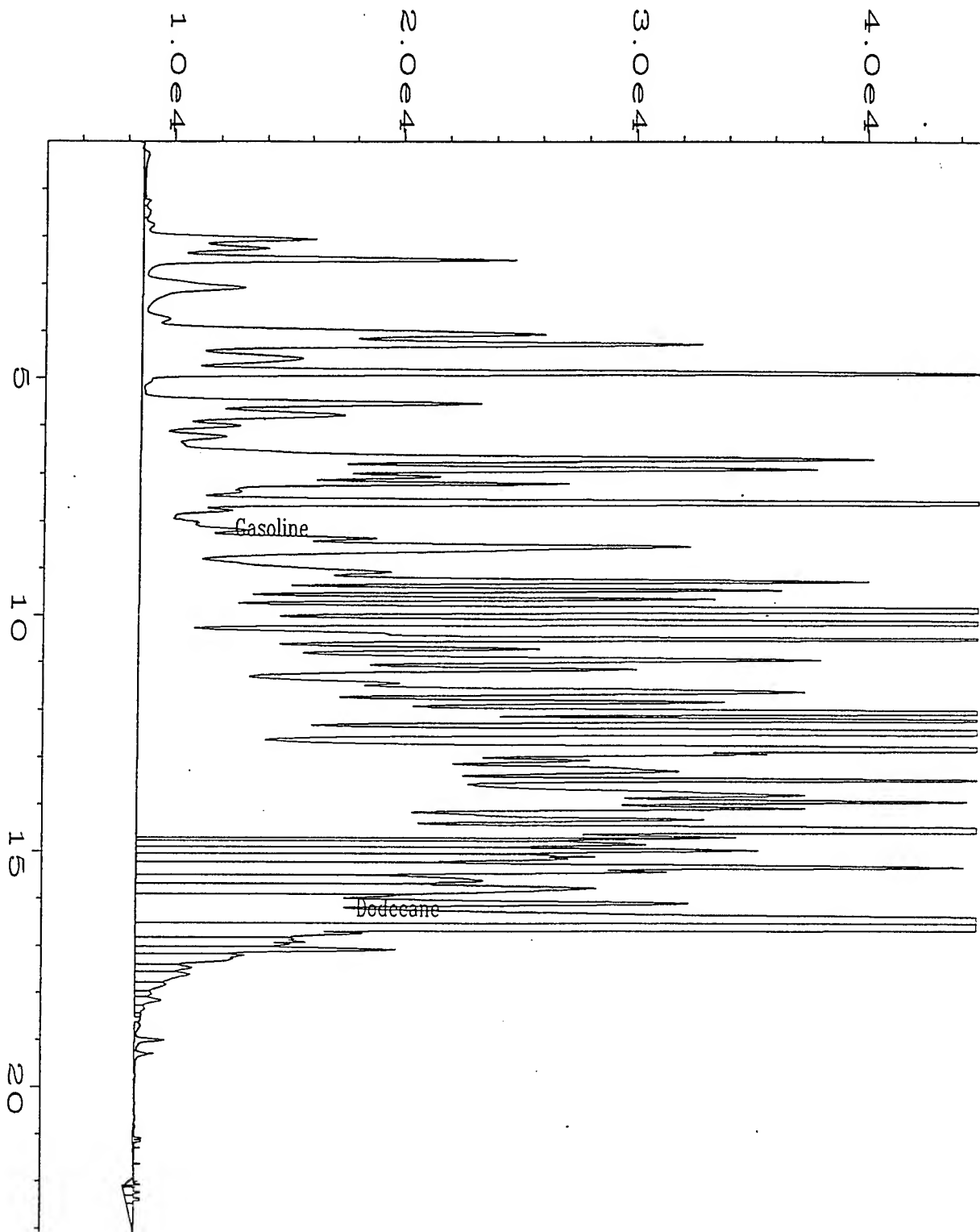
|                    |  |                    |              |
|--------------------|--|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\018F0101.D                | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                                   | Vial Number        | : 18         |
| Instrument         | : TVH  | Injection Number   | : 1          |
| Sample Name        | : X05760G;50;.1                                      | Sequence Line      | : 1          |
| Run Time Bar Code: |  | Instrument Method: | TVH1BA M     |
| Acquired on        | : 27 Apr 95 00:10 AM                                 | Analysis Method    | : TVH0426.MT |
| Port Created on:   | 27 Apr 95 10:21 AM                                   | Sample Amount      | : 0          |
| Last Recalib on    | : 26 APR 95 06:00 PM                                 | ISTD Amount        | :            |
| Multiplier         | : 50   |                    |              |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-1 11.5-13.5 DUP SOIL |                    |              |



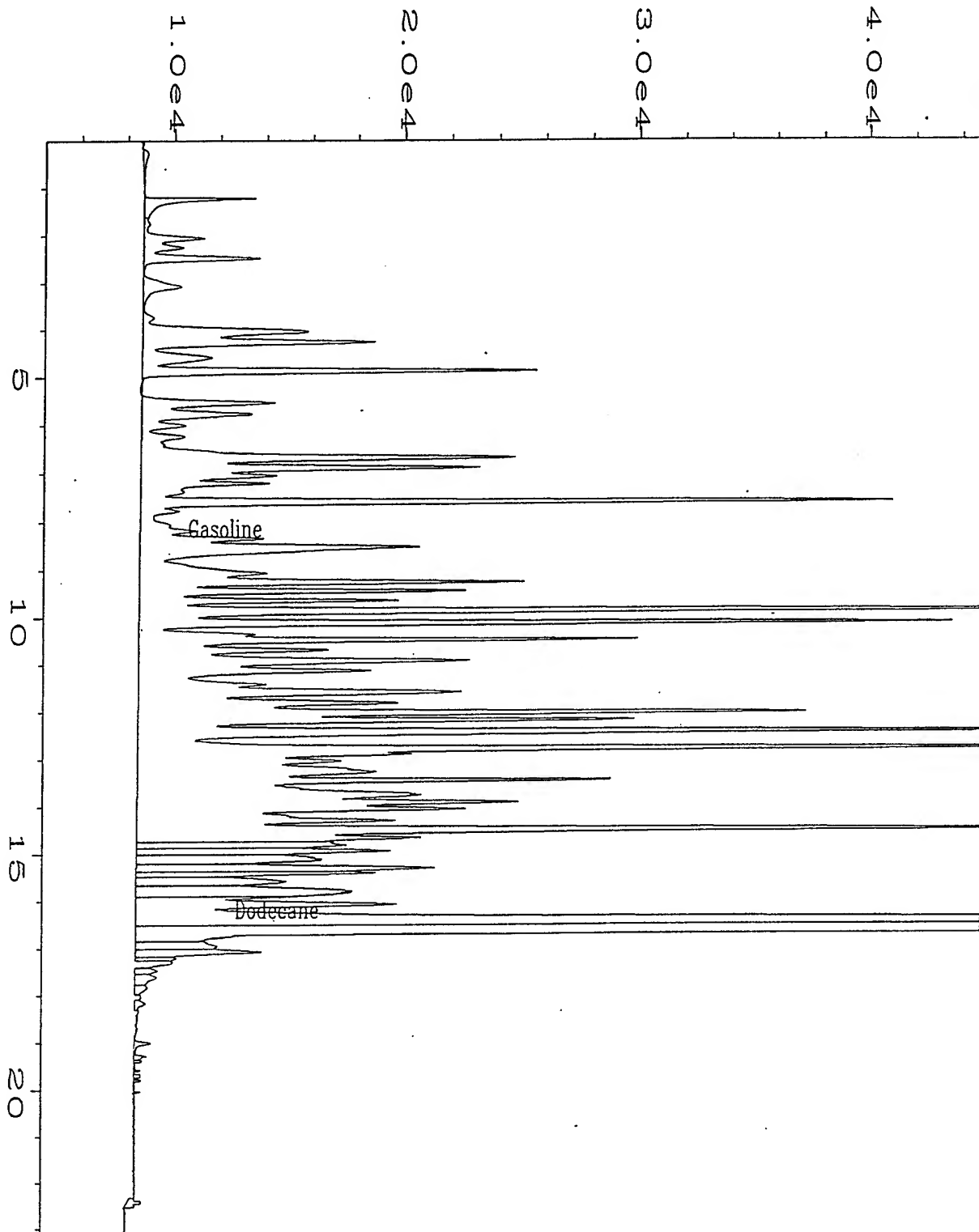
|                    |  |                    |               |
|--------------------|--|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\019F0101.D          | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                             | Vial Number        | : 19          |
| Instrument         | : TVH  | Injection Number   | : 1           |
| Sample Name        | : X05762;1;5                                   | Sequence Line      | : 1           |
| Run Time Bar Code: |  | Instrument Method: | TVH1BASE.MTH  |
| Required on        | : 27 Apr 95 00:46 AM                           | Analysis Method    | : TVH0426.MTH |
| Report Created on: | 27 Apr 95 10:21 AM                             | Sample Amount      | : 0           |
| Last Recalib on    | : 26 APR 95 06:00 PM                           | ISTD Amount        | :             |
| Multiplier         | : 1  |                    |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-1 16'-18' SOIL |                    |               |



|                    |  |                    |             |
|--------------------|--|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\021F0101.D            | Page Number        | : 1         |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 21        |
| Instrument         | : TVH  | Injection Number   | : 1         |
| Sample Name        | : X05763;1;5                                     | Sequence Line      | : 1         |
| Run Time Bar Code: |  | Instrument Method: | TVH1BAS.M   |
| Acquired on        | : 27 Apr 95 01:58 AM                             | Analysis Method    | : TVH0428.T |
| Report Created on: | 27 Apr 95 10:22 AM                               | Sample Amount      | : 0         |
| Last Recalib on    | : 26 APR 95 06:00 PM                             | ISTD Amount        | :           |
| Multiplier         | : 1  |                    |             |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-2 11.5-13.5 SOIL |                    |             |



|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\022F0101.D       | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                          | Vial Number       | : 22           |
| Instrument         | : TVH                                       | Injection Number  | : 1            |
| Sample Name        | : X05764C;50;.1                             | Sequence Line     | : 1            |
| Run Time Bar Code: |   | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 27 Apr 95 02:34 AM                        | Analysis Method   | : TVH0426.MTH  |
| Report Created on  | : 27 Apr 95 10:22 AM                        | Sample Amount     | : 0            |
| Last Recalib on    | : 26 APR 95 06:00 PM                        | ISTD Amount       | :              |
| Multiplier         | : 50  |                   |                |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-3 9-11 SOIL |                   |                |



|                    |   |                   |             |
|--------------------|---|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\023F0101.D           | Page Number       | : 1         |
| Operator           | : Dawn N. Guildner                              | Vial Number       | : 23        |
| Instrument         | : TVH   | Injection Number  | : 1         |
| Sample Name        | : X05764G;50;.1                                 | Sequence Line     | : 1         |
| Run Time Bar Code: |   | Instrument Method | : TVH1BAS.M |
| Acquired on        | : 27 Apr 95 03:10 AM                            | Analysis Method   | : TVH042.M  |
| Report Created on: | : 27 Apr 95 10:22 AM                            | Sample Amount     | : 0         |
| Last Recalib on    | : 26 APR 95 06:00 PM                            | ISTD Amount       | :           |
| Multiplier         | : 50  |                   |             |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-3 9-11 DUP SOIL |                   |             |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

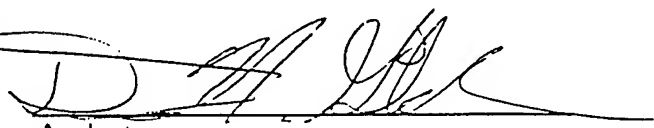
TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
Laboratory Control Sample (LCS)

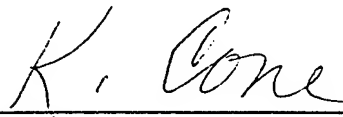
LCS Number : LCS042695 Matrix : SOIL  
Date Prepared : 4/26/95 Method Numbers : EPA 5030/8015 Modified  
Date Analyzed : 4/26/95  
Sequence Number : TVH8

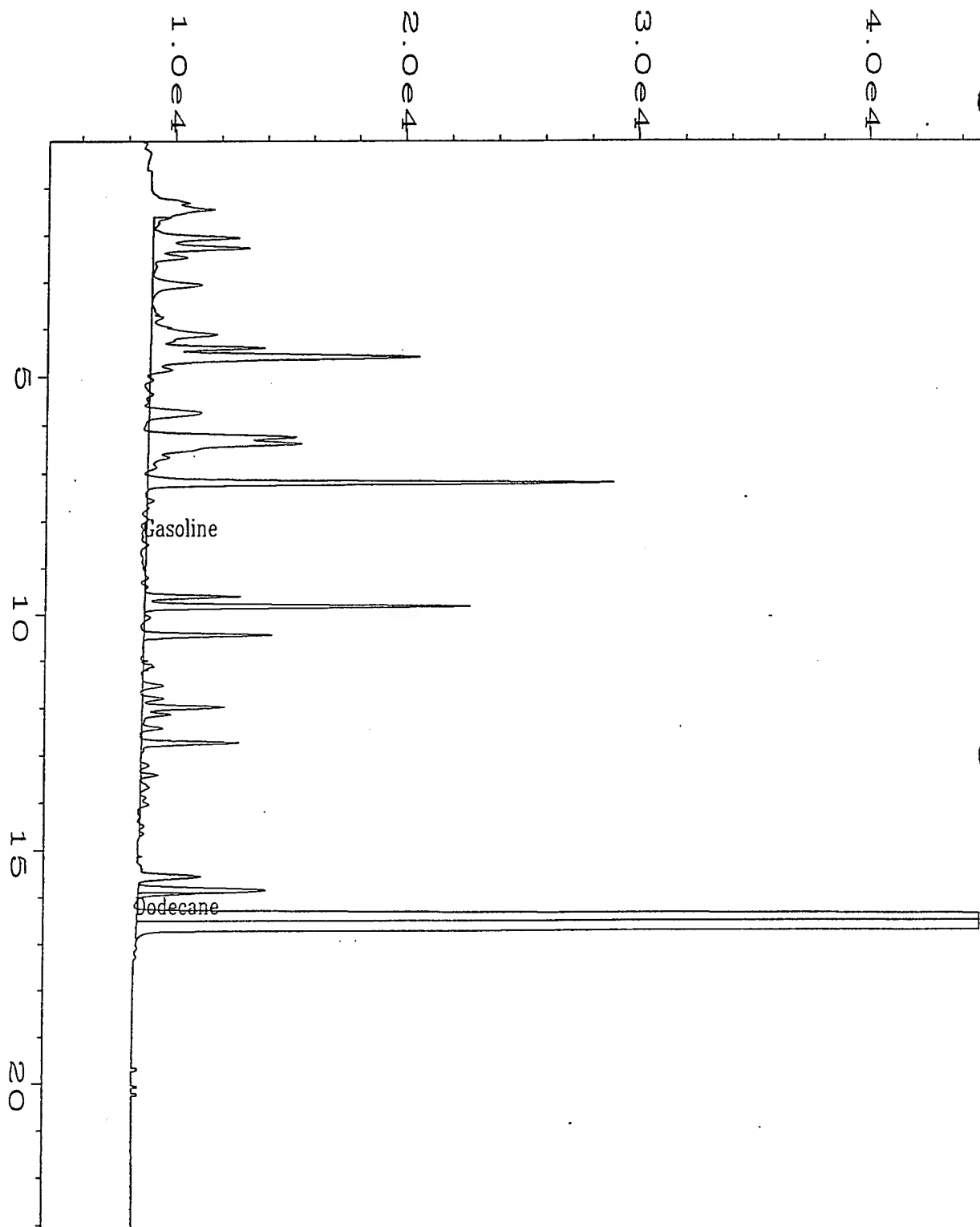
| <u>Compound<br/>Name</u> | <u>Theoretical<br/>Concentration<br/>mg/kg</u> | <u>LCS<br/>Concentration<br/>mg/kg</u> | <u>LCS<br/>%<br/>Recovery</u> | <u>QC Limit<br/>% Recovery</u> |
|--------------------------|--|--|-------------------------------|--------------------------------|
| Gasoline                 | 5.00   | 5.70                                   | 114%                          | 70%-130%                       |

QUALIFIERS

U = TVH analyzed for but not detected.  
B = TVH as Gasoline found in blank also.  
E = Extrapolated value.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0426\008F0101.D | Page Number       | : 1          |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 8          |
| Instrument         | : TVH                                 | Injection Number  | : 1          |
| Sample Name        | : LCS042695                           | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BAST.M |
| Acquired on        | : 26 Apr 95 06:10 PM                  | Analysis Method   | : TVH0426.M  |
| Report Created on: | : 26 Apr 95 06:47 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 26 APR 95 06:00 PM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
TVH Matrix Spike/Matrix Spike Duplicate Data Report

Client Sample No. : MW-11 11.5 13.5      Client Project No. : 722450.26020  
Lab Sample No. : X05759      Lab Project No. : 95-1217  
Date Sampled : 4/13/95      EPA Method No. : 5030/8015 Modified  
Date Received : 4/14/95      Matrix : SOIL  
Date Prepared : 4/27/95      Method Blank : MB042695  
Date Analyzed : 4/27/95

| Compound | Spike Added (mg/L) | Sample Concentration (mg/L) | MS Concentration (mg/L) | MS %REC | QC Limits %REC |
|----------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Gasoline | 2.00               | 0.00                        | 2.10                    | 105%    | 60-140         |

| Compound | Spike Added (mg/L) | MSD Concentration (mg/L) | MSD %REC | RPD | QC Limits |        |
|----------|--------------------|--------------------------|----------|-----|-----------|--------|
|          |                    |                          |          |     | RPD       | %REC   |
| Gasoline | 2.00               | 1.76                     | 88%      | 18  | 50        | 60-140 |

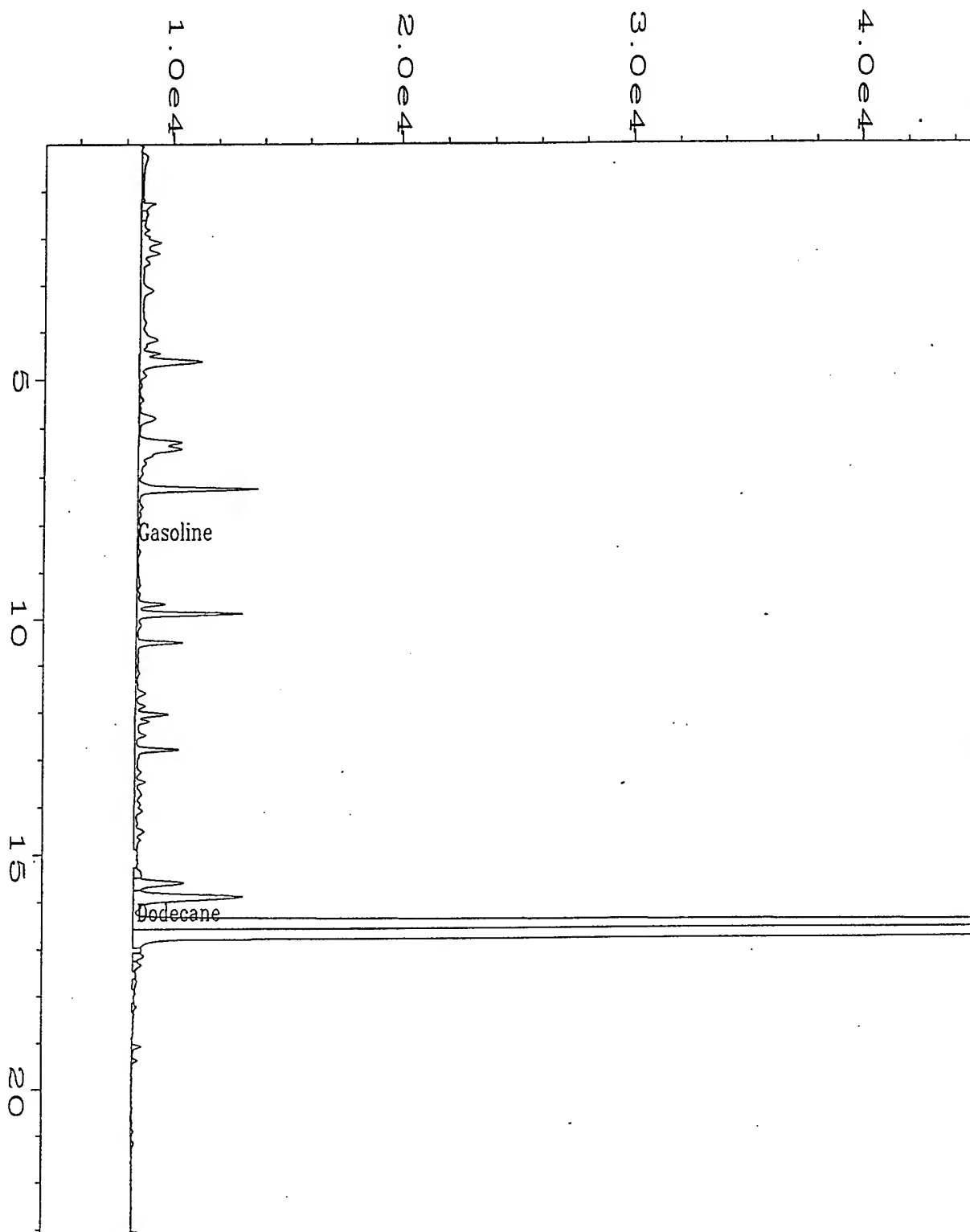
\* = Values outside of QC limits.

RPD: 0 out of (1) outside limits.  
Spike Recovery: 0 out of (2) outside limits.

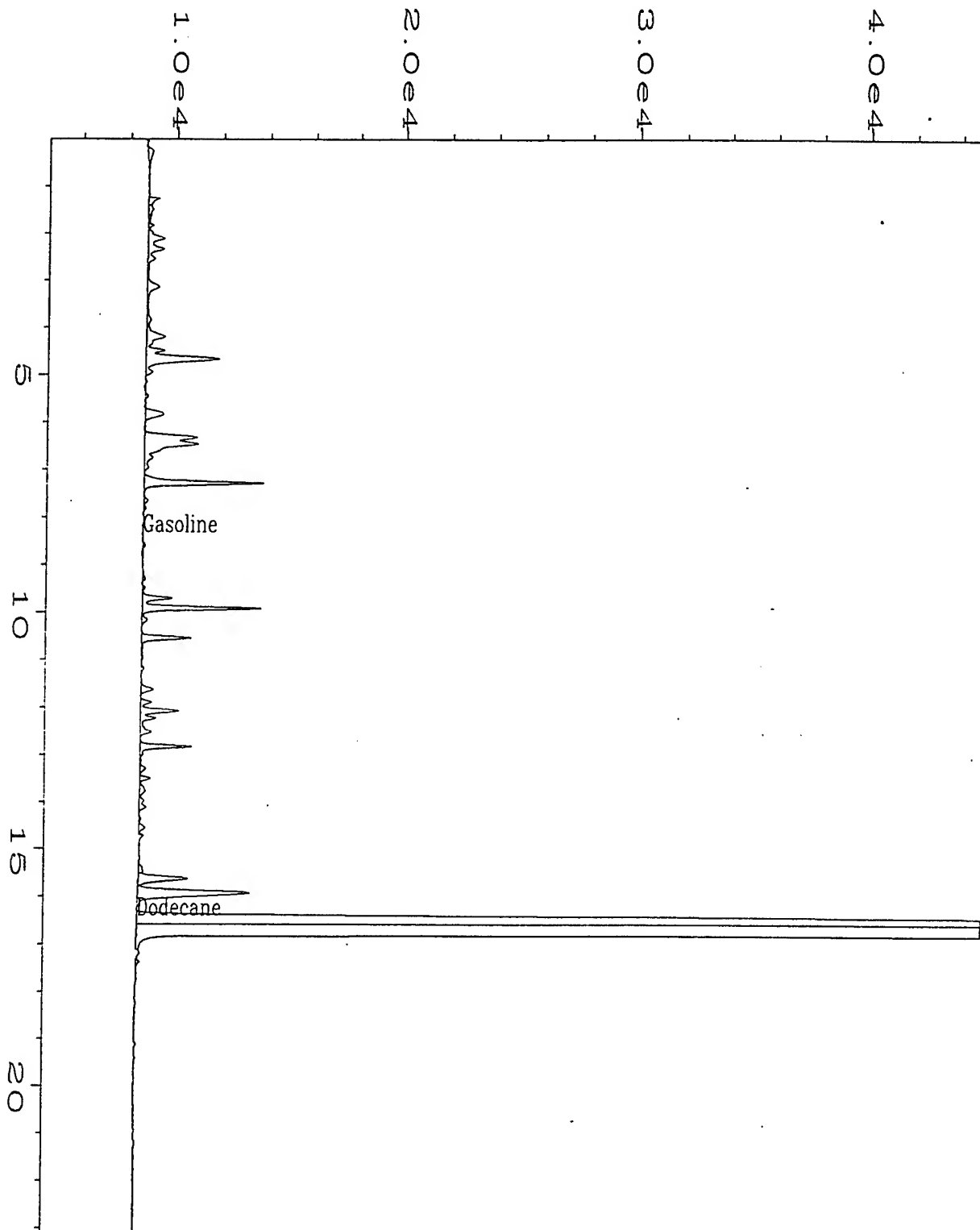
NA = Not analyzed/not applicable.

*WJM 5/3/95*

Comments:



|                    |                                       |                    |             |
|--------------------|---------------------------------------|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0426\037F0101.D | Page Number        | : 1         |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 37        |
| Instrument         | : TVH                                 | Injection Number   | : 1         |
| Sample Name        | : X05759 MS                           | Sequence Line      | : 1         |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BA7 M   |
| Acquired on        | : 27 Apr 95 05:02 PM                  | Analysis Method    | : TVH042 MT |
| Report Created on: | : 28 Apr 95 08:00 AM                  | Sample Amount      | : 0         |
| Last Recalib on    | : 26 APR 95 06:00 PM                  | ISTD Amount        | :           |
| Multiplier         | : 1                                   |                    |             |



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0426\033F0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 33           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05759 MSD                          | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Required on        | : 27 Apr 95 02:38 PM                  | Analysis Method   | : TVH0426.MTH  |
| Report Created on: | 27 Apr 95 03:14 PM                    | Sample Amount     | : 0            |
| Last Recalib on    | : 26 APR 95 06:00 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL EXTRACTABLE HYDROCARBONS (TEH)  
JET FUEL

|               |                 |                       |                        |
|---------------|-----------------|-----------------------|------------------------|
| Date Sampled  | : 4/12,13/95    | Client Project Number | : 722450.26020/SEYMORE |
| Date Received | : 4/14/95       | Lab Project Number    | : 95-1217              |
| Date Prepared | : 4/17,21/1995  | Matrix                | : Soil                 |
| Date Analyzed | : 4/19,20,24/95 | Method Number         | : 3500/Mod. 8015       |

| Evergreen<br>Sample # | Client<br>Sample # | OTP<br>Surrogate<br>% Recovery | TEH*<br>Jet Fuel<br>mg/Kg | RL*<br>mg/Kg |
|-----------------------|--------------------|--------------------------------|---------------------------|--------------|
| SB041795              | SOIL METHOD BLANK  | 97%                            | U                         | 10           |
| X05753                | MW-6 15-16'        | 85%                            | U                         | 13           |
| X05755                | 95-MW-8 11-12'     | 88%                            | U                         | 13           |
| X05756                | MW-9 15-16'        | 90%                            | U                         | 12           |
| X05757                | MW-10 10-11'       | 95%                            | U                         | 13           |
| X05759                | MW-11 11.5-13.5    | 87%                            | U                         | 13           |
| X05760 D              | SS-1 11.5-13.5     | **                             | 2600                      | 110          |
| X05760 H              | SS-1 11.5-13.5 DUP | **                             | 3200                      | 110          |
| X05762                | SS-1 16'-18'       | 90%                            | U                         | 11           |
| X05763                | SS-2 11.5-13.5     | 84%                            | U                         | 11           |
| X05764                | SS-3 9-11          | **                             | 4100                      | 110          |
| SB042195              | SOIL METHOD BLANK  | 100%                           | U                         | 10           |
| X05764 DUP            | SS-3 9-11          | 118%                           | 4800                      | 11           |

OTP Soil Surrogate % Recovery limits: 60% - 118%

QUALIFIERS

U = TEH analyzed for but not detected.

B = TEH found in blank as well as sample (blank data should be compared).

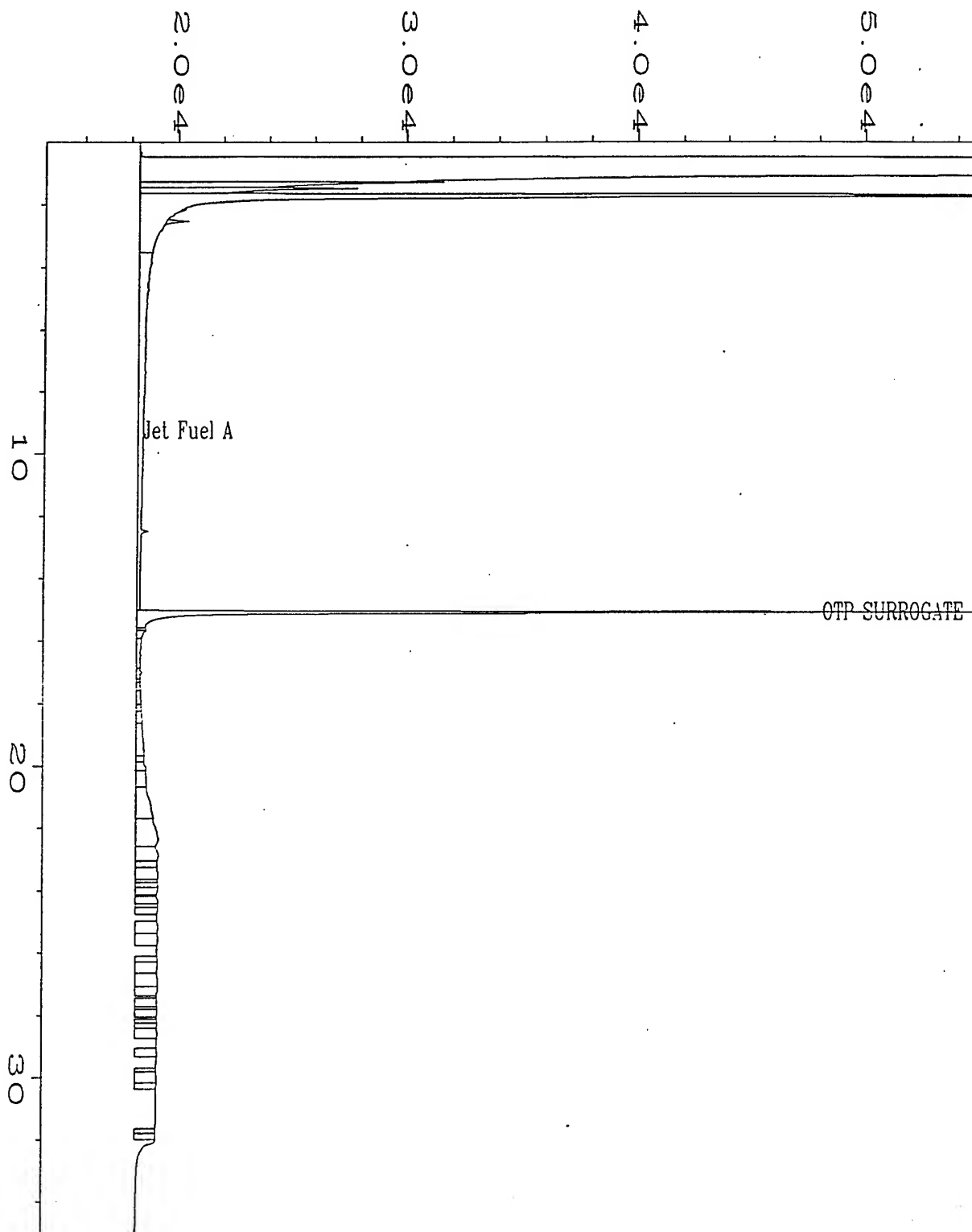
RL = Reporting Limit

\*\* = Diluted out.

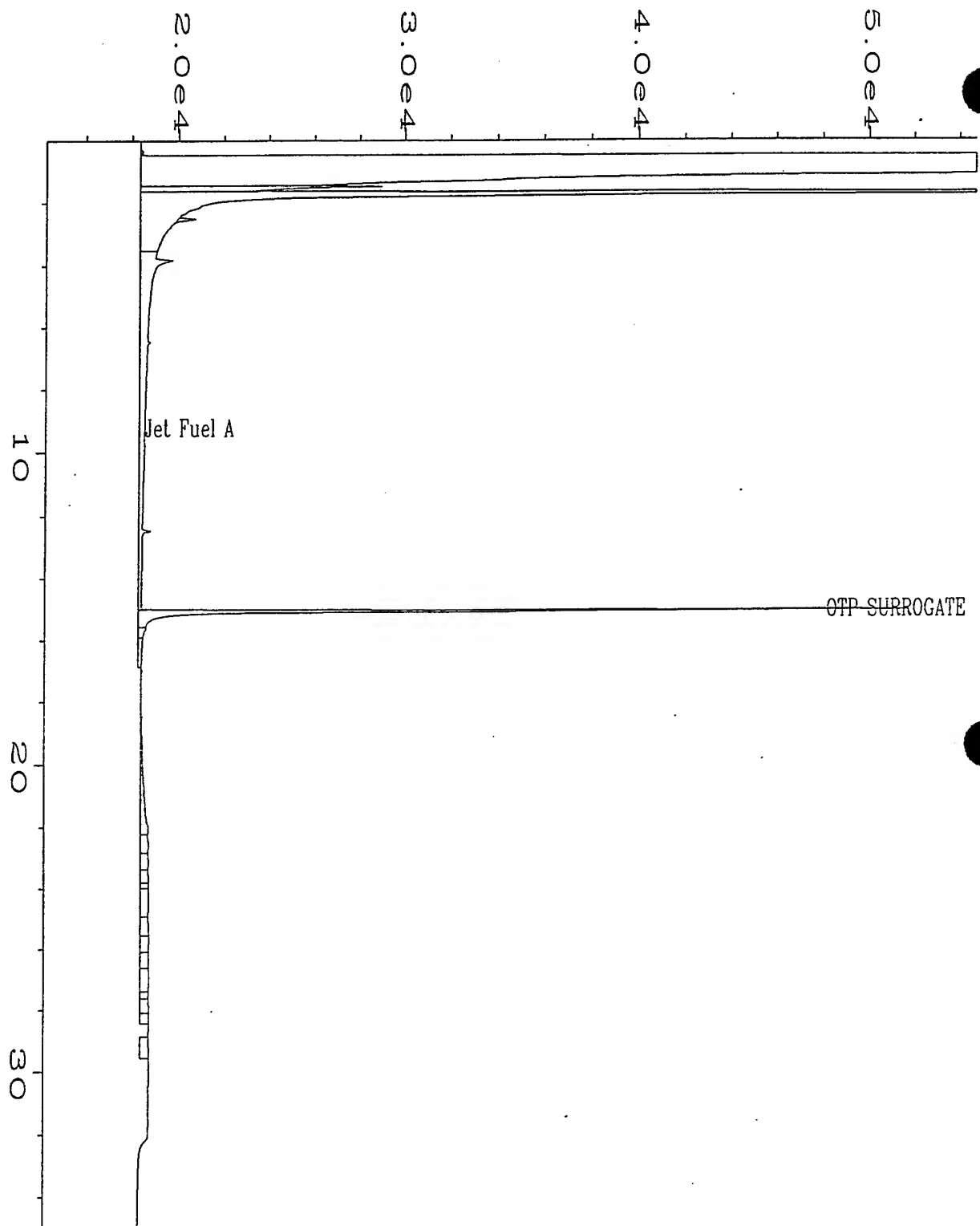
\* = Based on dry weight.

Analyst

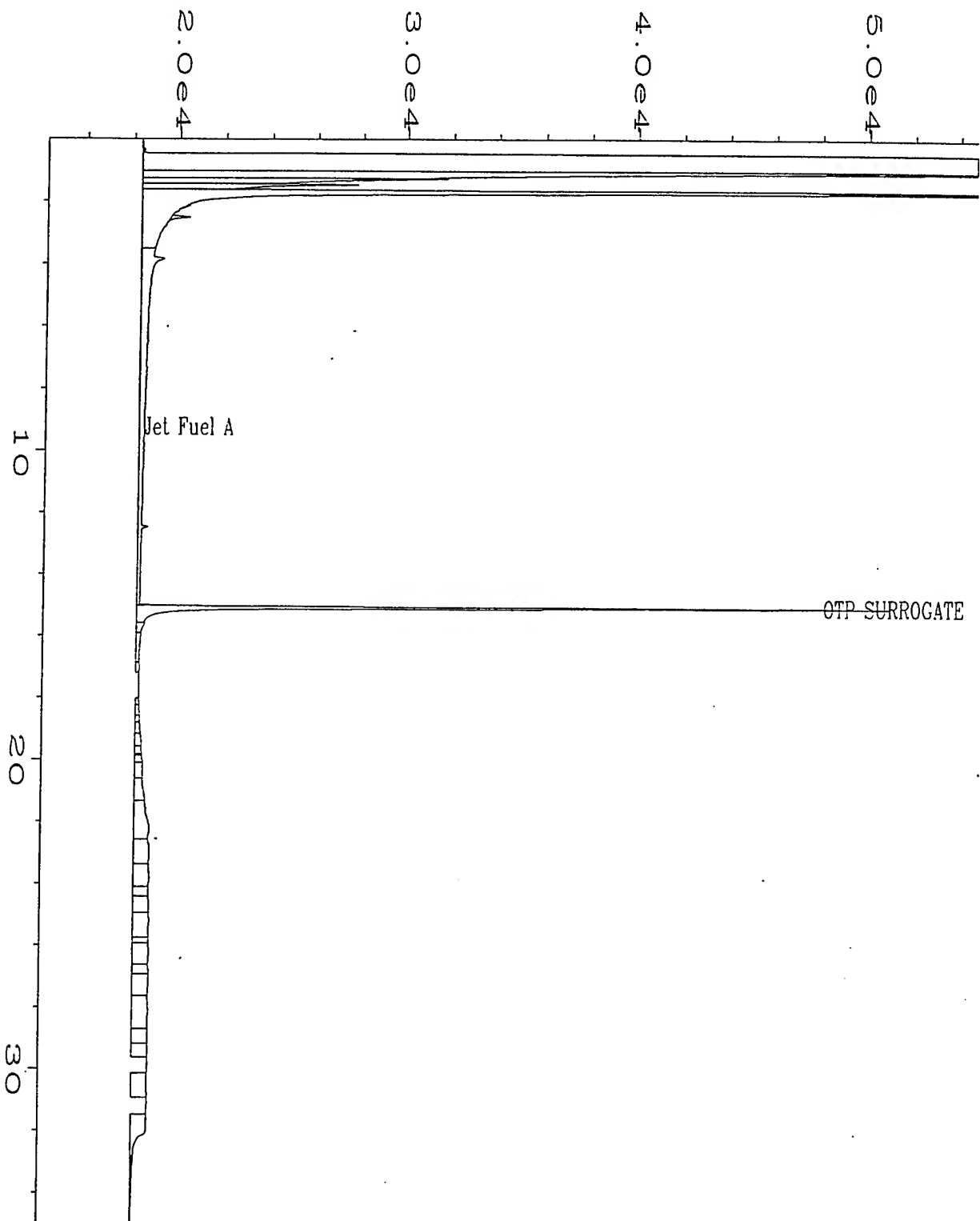
Approved



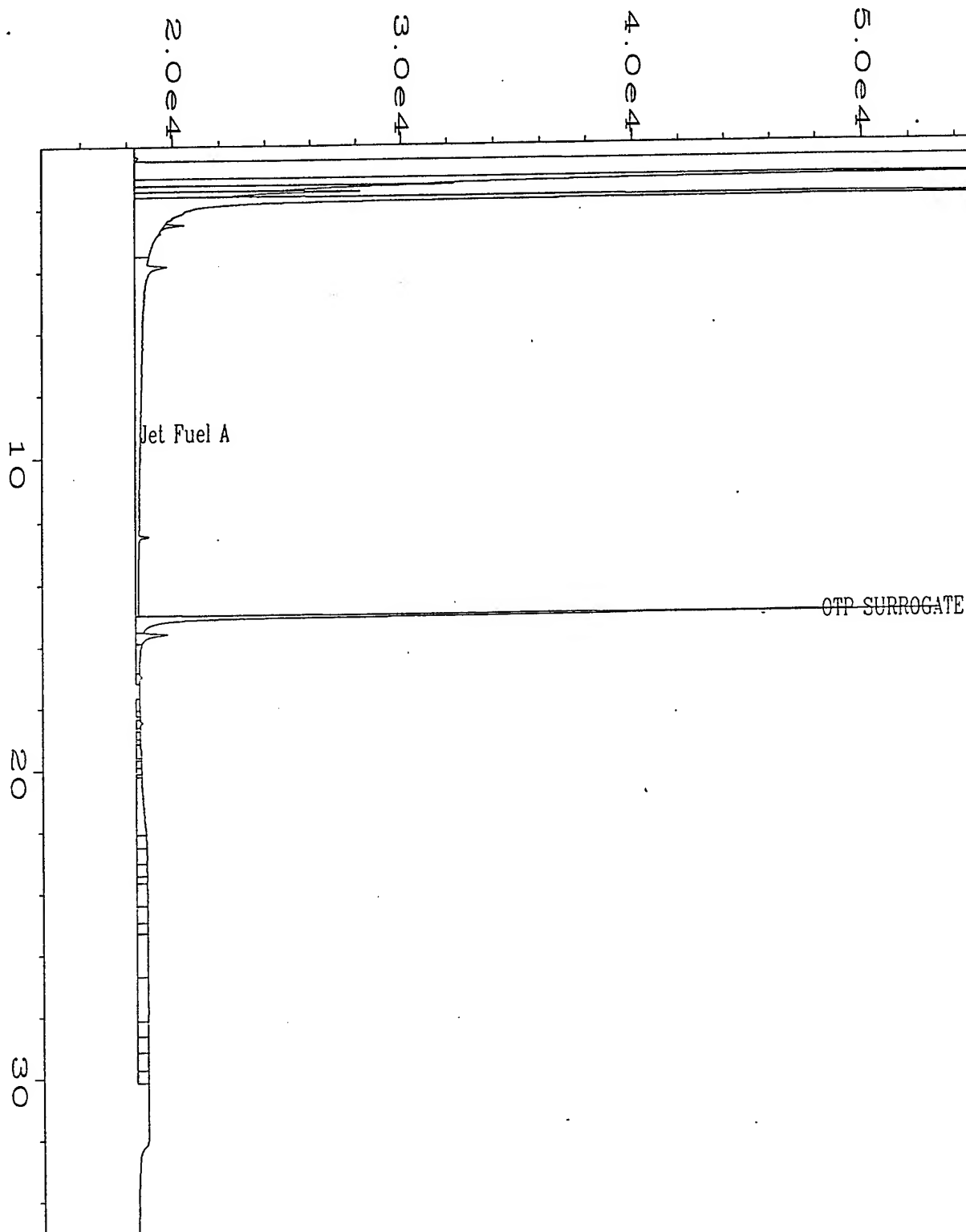
|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\020R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 20           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : SB041795                            | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 19 Apr 95 01:26 AM                  | Analysis Method   | : JET0418.MTH  |
| Report Created on  | : 19 Apr 95 10:17 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 18 APR 95 06:54 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |



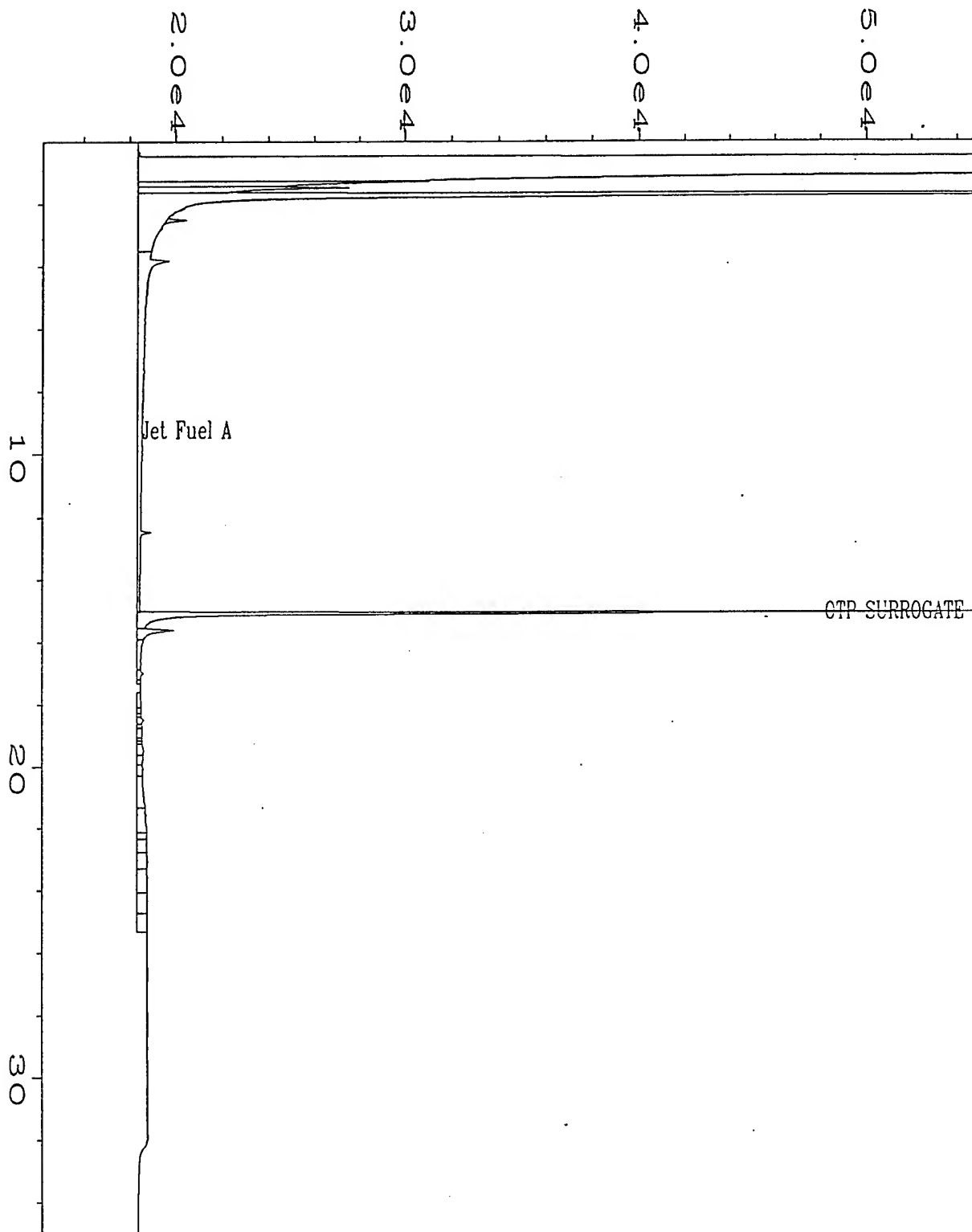
|                    |   |                   |              |
|--------------------|---|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\025R0101.D         | Page Number       | : 1          |
| Operator           | : Dawn N. Guildner                            | Vial Number       | : 25         |
| Instrument         | : TEH   | Injection Number  | : 1          |
| Sample Name        | : X05753 DF=1                                 | Sequence Line     | : 1          |
| Run Time Bar Code: |   | Instrument Method | : FID1B7.F.M |
| Acquired on        | : 19 Apr 95 05:17 AM                          | Analysis Method   | : JET0418.MT |
| Report Created on: | : 19 Apr 95 10:18 AM                          | Sample Amount     | : 0          |
| Last Recalib on    | : 18 APR 95 06:54 PM                          | ISTD Amount       | :            |
| Multiplier         | : 1   |                   |              |
| Sample Info        | : PROJECT # 95-1217 CLIENT # MW-6 15-16' SOIL |                   |              |



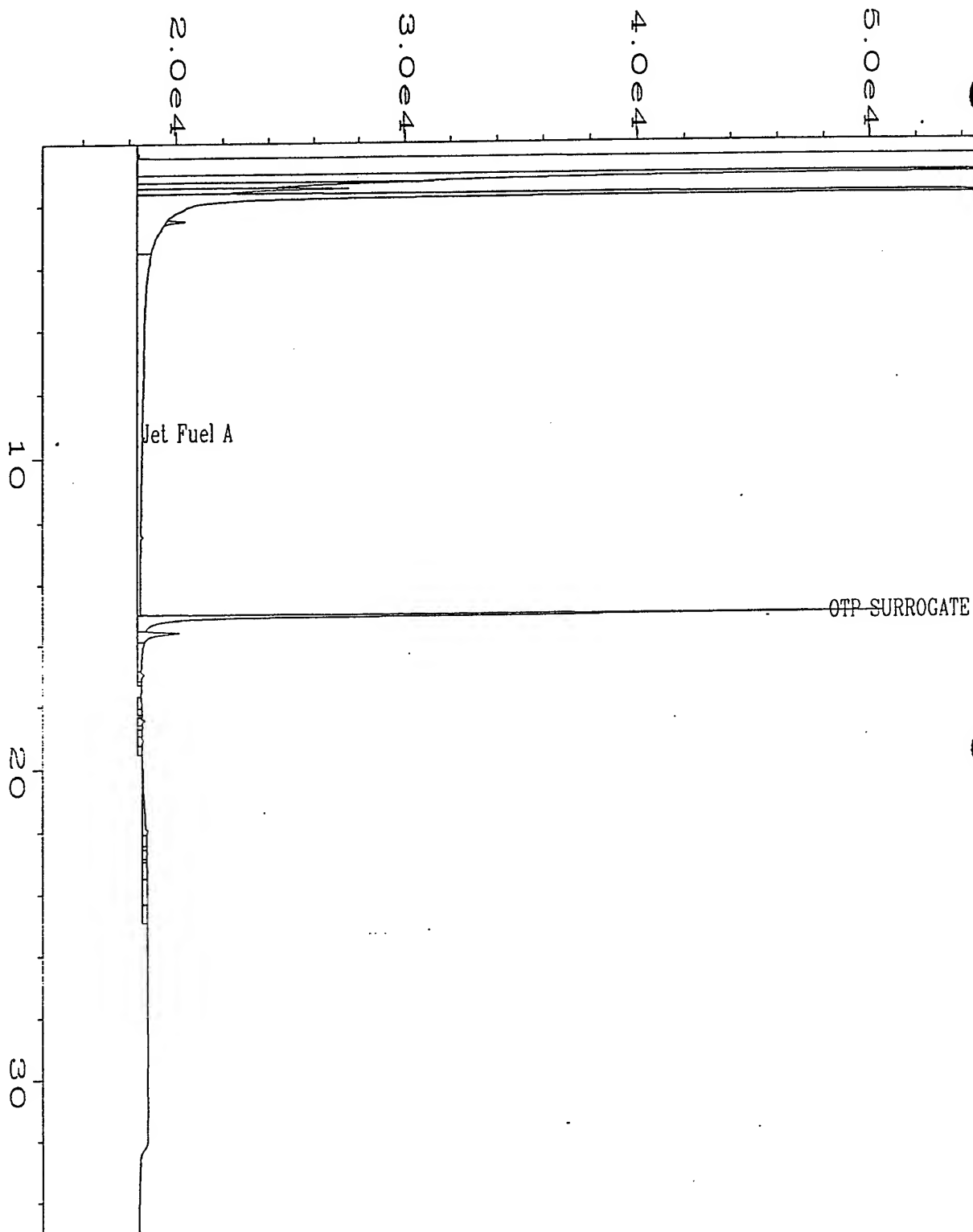
|                    |  |                    |               |
|--------------------|--|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\022R0101.D            | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 22          |
| Instrument         | : TEH  | Injection Number   | : 1           |
| Sample Name        | : X05755 DF=1                                    | Sequence Line      | : 1           |
| Run Time Bar Code: |  | Instrument Method: | FID1BASE.MTH  |
| Acquired on        | : 19 Apr 95 02:58 AM                             | Analysis Method    | : JET0418.MTH |
| Report Created on: | 19 Apr 95 10:17 AM                               | Sample Amount      | : 0           |
| Last Recalib on    | : 18 APR 95 06:54 PM                             | ISTD Amount        | :             |
| Multiplier         | : 1  |                    |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # 95-MW-8 11-12' SOIL |                    |               |



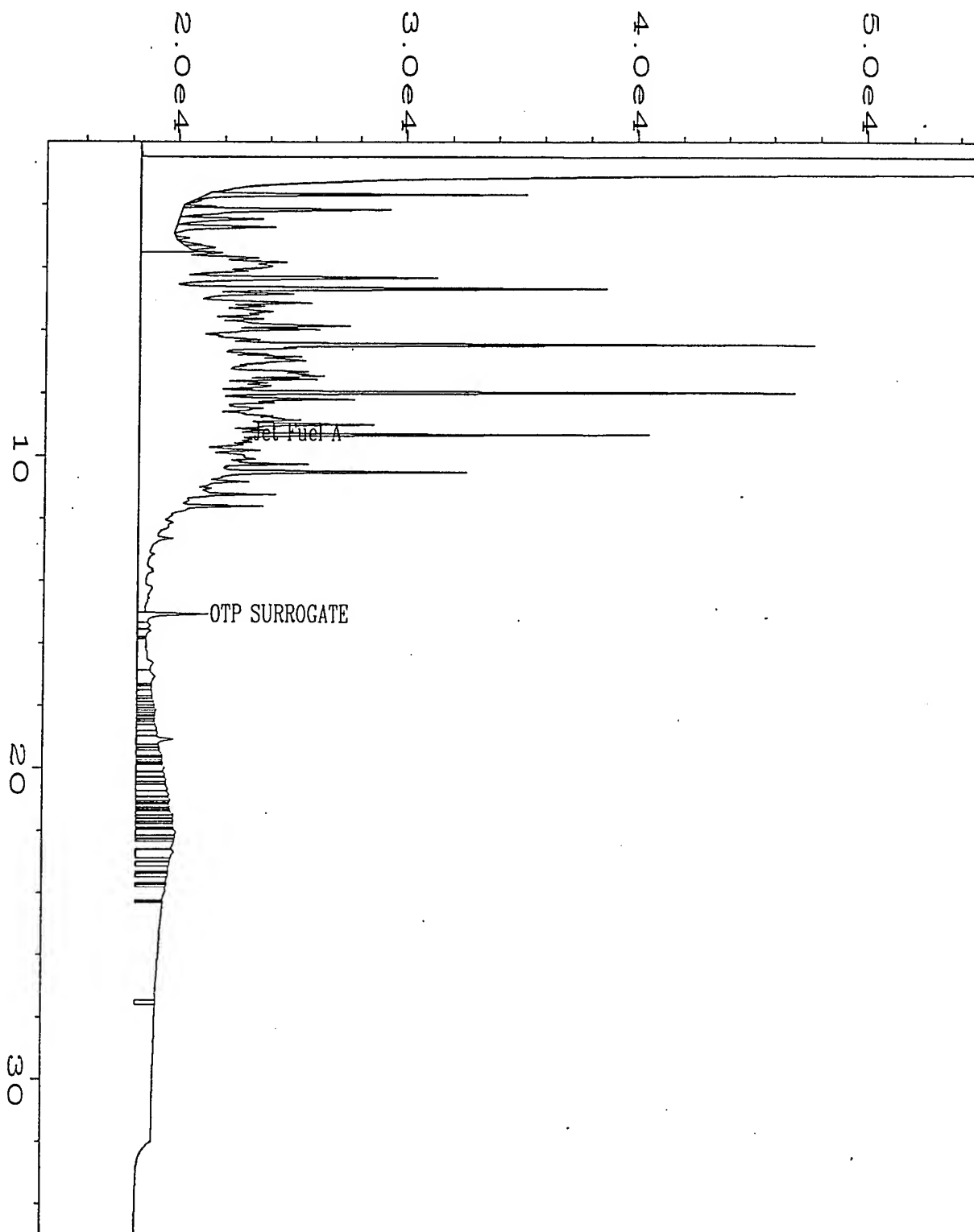
|                    |  |                   |              |
|--------------------|--|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\026R0101.D        | Page Number       | : 1          |
| Operator           | : Dawn N. Guildner                           | Vial Number       | : 26         |
| Instrument         | : TEH  | Injection Number  | : 1          |
| Sample Name        | : X05756 DF=1                                | Sequence Line     | : 1          |
| Run Time Bar Code: |  | Instrument Method | : FID1BACT.1 |
| Required on        | : 19 Apr 95 06:03 AM                         | Analysis Method   | : JET0418.M  |
| Report Created on  | : 19 Apr 95 10:18 AM                         | Sample Amount     | : 0          |
| Last Recalib on    | : 18 APR 95 06:54 PM                         | ISTD Amount       | :            |
| Multiplier         | : 1  |                   |              |
| Sample Info        | : PROJECT # 95-1217 CLIENT # MW-915-16' SOIL |                   |              |



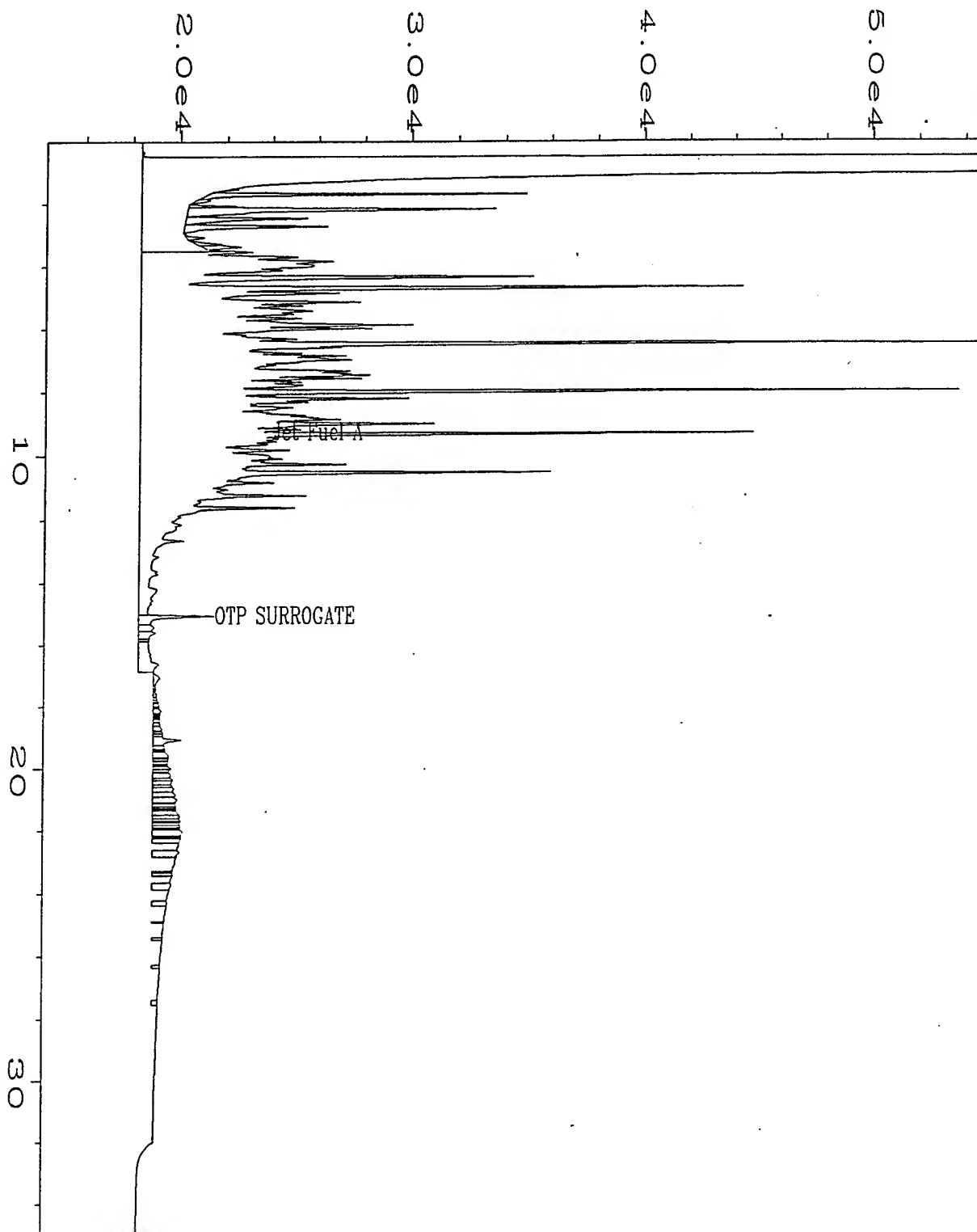
|                    |  |                    |               |
|--------------------|--|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\027R0101.D          | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                             | Vial Number        | : 27          |
| Instrument         | : TEH  | Injection Number   | : 1           |
| Sample Name        | : X05757 DF=1                                  | Sequence Line      | : 1           |
| Run Time Bar Code: |  | Instrument Method: | FID1BASE.MT   |
| Acquired on        | : 19 Apr 95 06:50 AM                           | Analysis Method    | : JET0418.MTH |
| Report Created on: | 19 Apr 95 10:18 AM                             | Sample Amount      | : 0           |
| Last Recalib on    | : 18 APR 95 06:54 PM                           | ISTD Amount        | :             |
| Multiplier         | : 1  |                    |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # MW-10 10-11' SOIL |                    |               |



|                    |   |                   |             |
|--------------------|---|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\028R0101.D             | Page Number       | : 1         |
| Operator           | : Dawn N. Guildner                                | Vial Number       | : 28        |
| Instrument         | : TEH   | Injection Number  | : 1         |
| Sample Name        | : X05759 DF=1                                     | Sequence Line     | : 1         |
| Run Time Bar Code: |   | Instrument Method | : FID1BA7.1 |
| Required on        | : 19 Apr 95 07:36 AM                              | Analysis Method   | : JET0418.M |
| Report Created on: | : 19 Apr 95 10:18 AM                              | Sample Amount     | : 0         |
| Last Recalib on    | : 18 APR 95 06:54 PM                              | ISTD Amount       | :           |
| Multiplier         | : 1   |                   |             |
| Sample Info        | : PROJECT # 95-1217 CLIENT # MW-11 11.5-13.5 SOIL |                   |             |

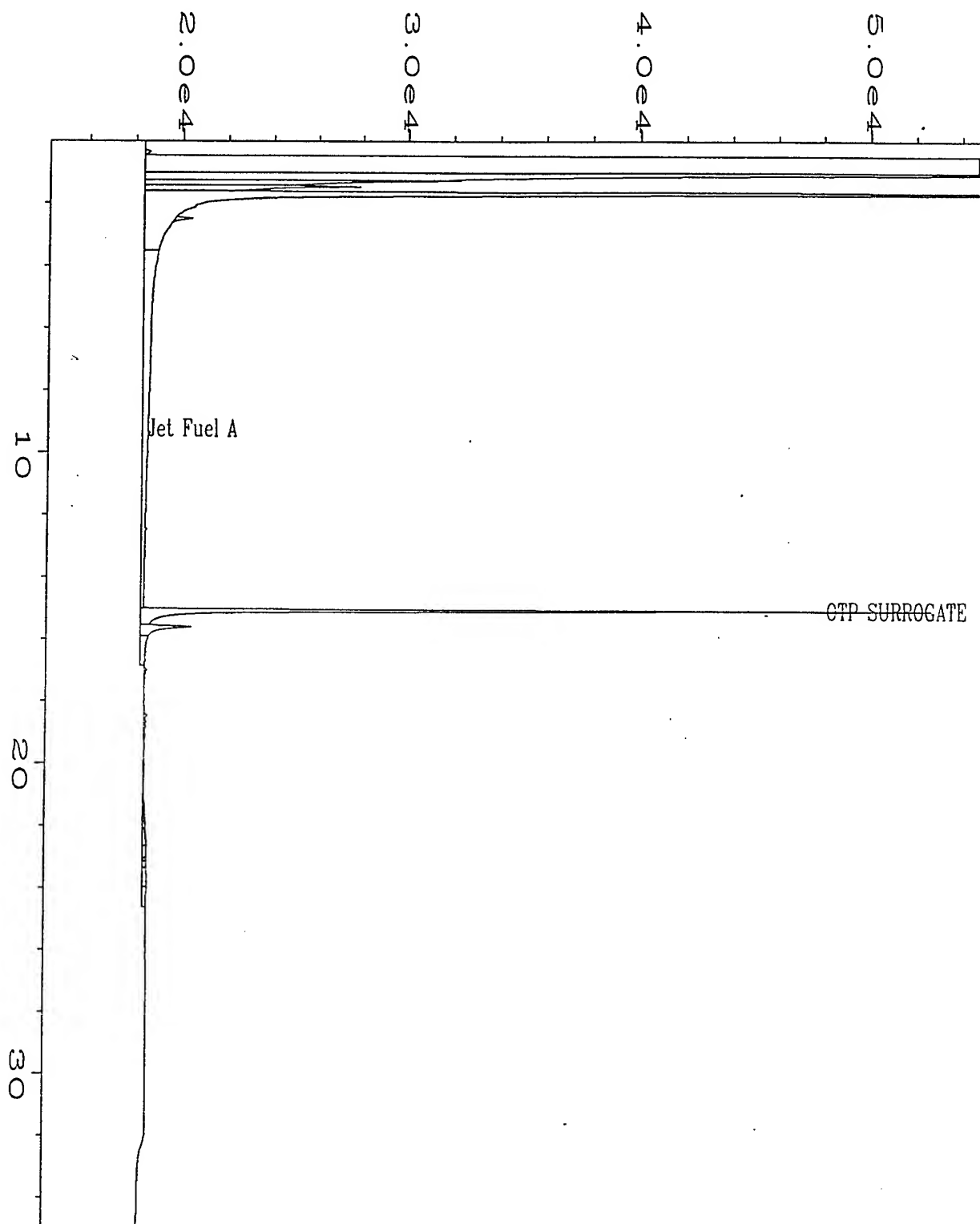


|                    |  |                    |               |
|--------------------|--|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\039R0101.D            | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 39          |
| Instrument         | : TEH  | Injection Number   | : 1           |
| Sample Name        | : X057600DF=10                                   | Sequence Line      | : 1           |
| Run Time Bar Code: |  | Instrument Method: | FID1BASE.MTH  |
| Acquired on        | : 19 Apr 95 05:04 PM                             | Analysis Method    | : JET0418.MTH |
| Report Created on: | 20 Apr 95 09:24 AM                               | Sample Amount      | : 0           |
| Last Recalib on    | : 18 APR 95 06:54 PM                             | ISTD Amount        | :             |
| Multiplier         | : 10   |                    |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-1 11.5-13.5 SOIL |                    |               |

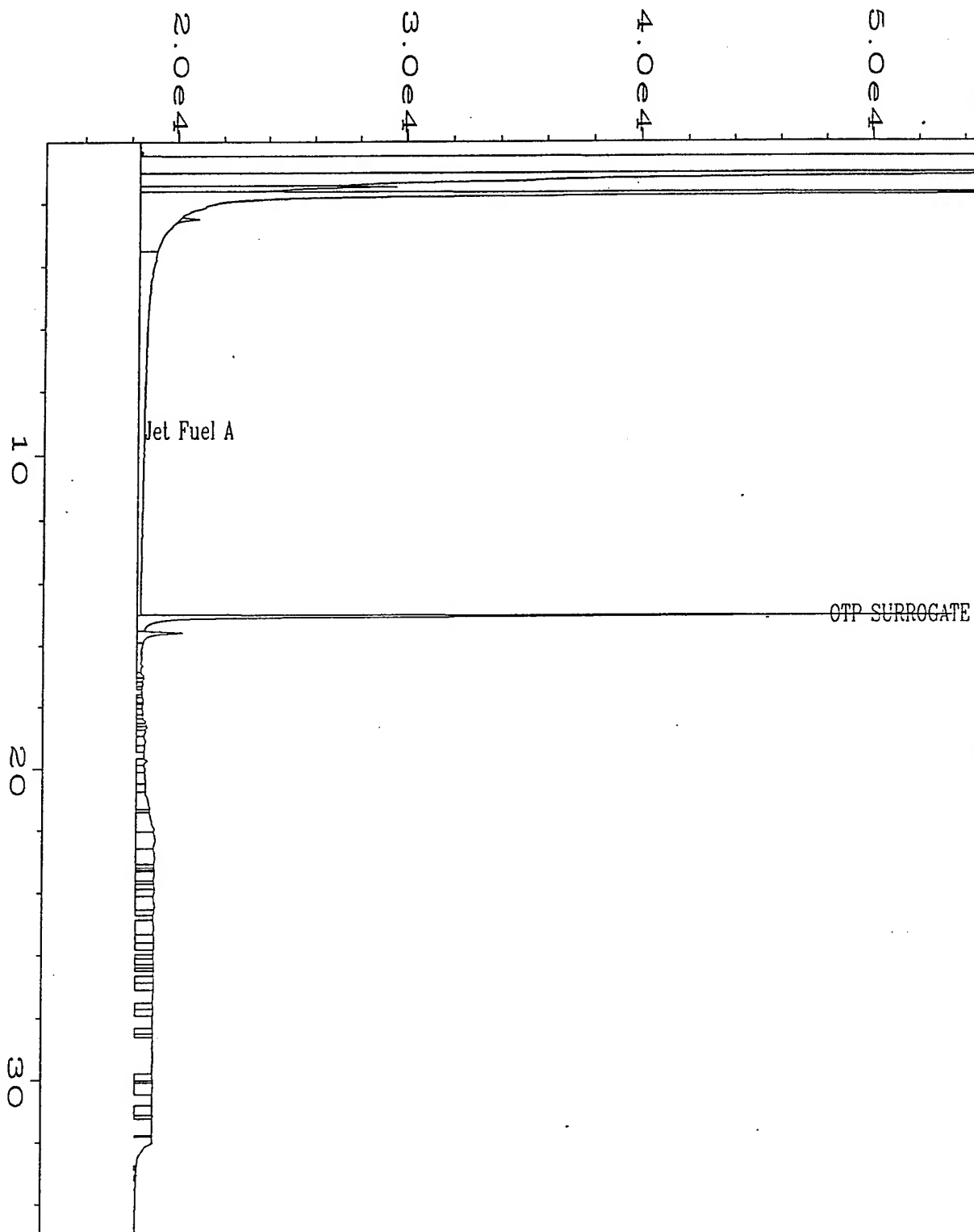


|                    |                                       |                    |            |
|--------------------|---------------------------------------|--------------------|------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\040R0101.D | Page Number        | : 1        |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 40       |
| Instrument         | : TEH                                 | Injection Number   | : 1        |
| Sample Name        | : <del>WB041395</del> X05760H         | Sequence Line      | : 1        |
| Run Time Bar Code: |                                       | Instrument Method: | FID1BAS M  |
| Acquired on        | : 19 Apr 95 05:50 PM                  | Analysis Method    | : JET041 T |
| Port Created on:   | 20 Apr 95 09:24 AM                    | Sample Amount      | : 0        |
| Last Recalib on    | : 18 APR 95 06:54 PM                  | ISTD Amount        | :          |
| Multiplier         | : 1                                   |                    |            |

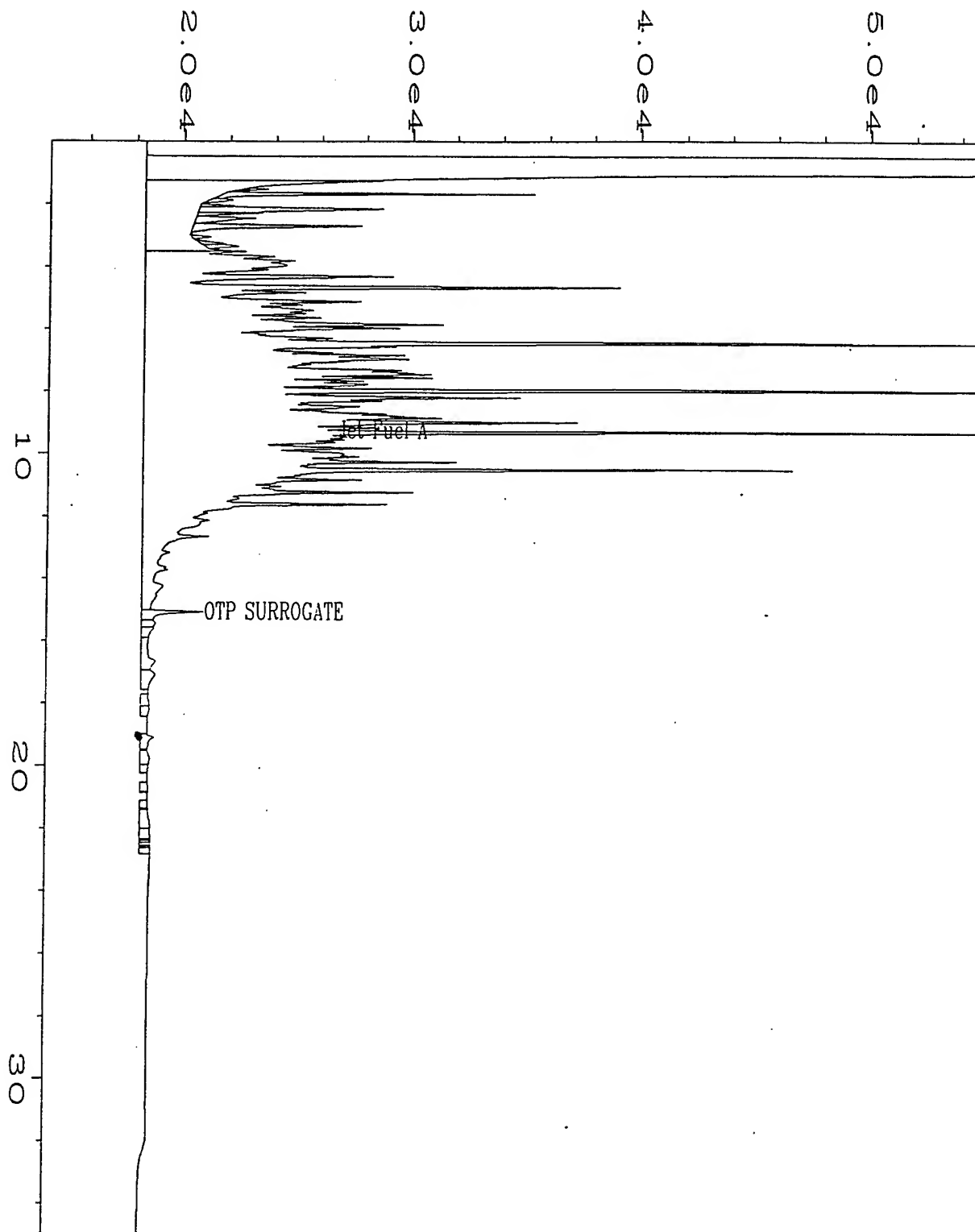
Client # SS-1 11.5-13.5 DUPLICATE



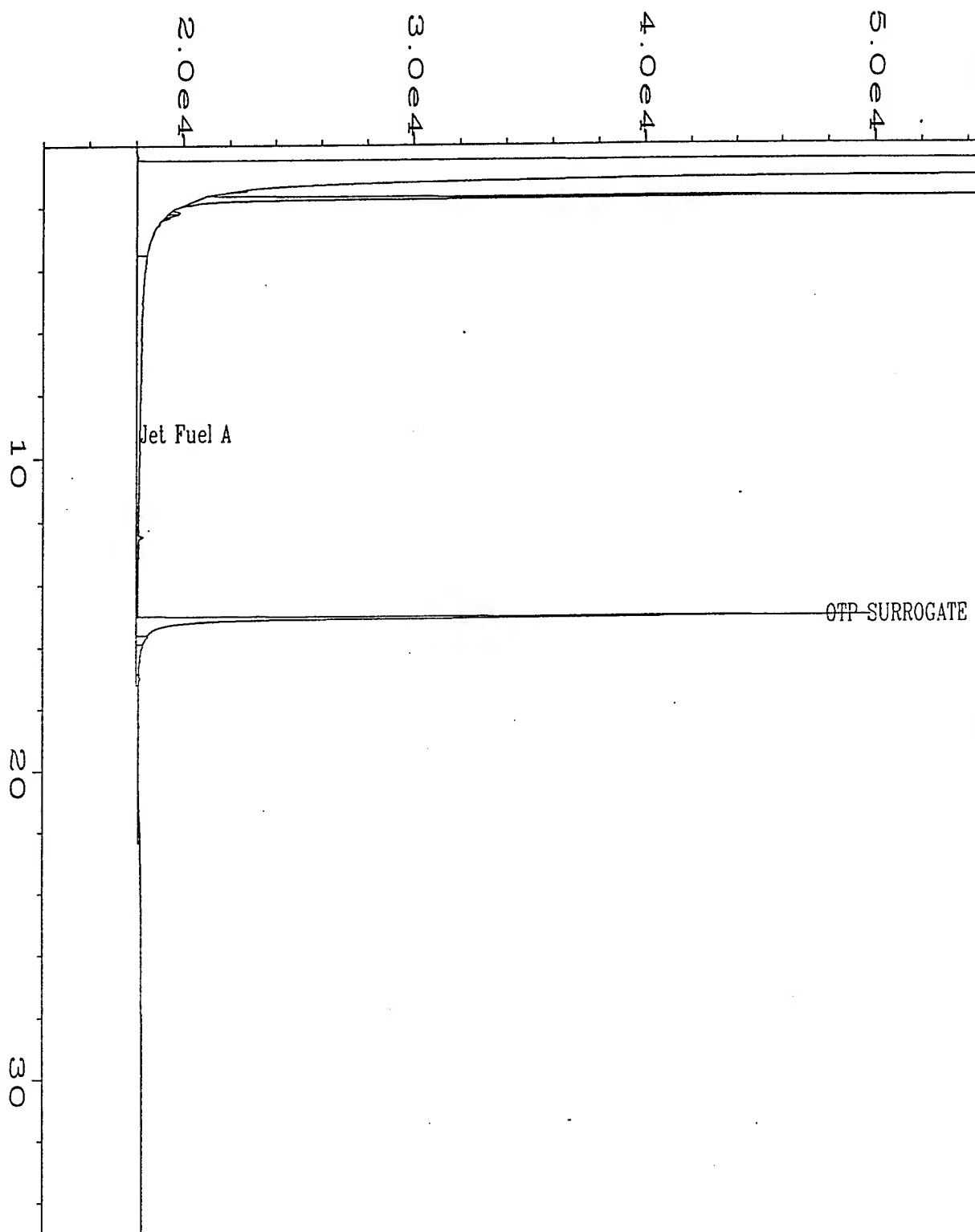
|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\054R0101.D          | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                             | Vial Number       | : 54           |
| Instrument         | : TEH  | Injection Number  | : 1            |
| Sample Name        | : X05762 DF=1                                  | Sequence Line     | : 1            |
| Run Time Bar Code: |  | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 20 Apr 95 11:37 AM                           | Analysis Method   | : JET0418.MTH  |
| Report Created on: | : 20 Apr 95 01:10 PM                           | Sample Amount     | : 0            |
| Last Recalib on    | : 18 APR 95 06:54 PM                           | ISTD Amount       | :              |
| Multiplier         | : 1  |                   |                |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-1 16'-18' SOIL |                   |                |



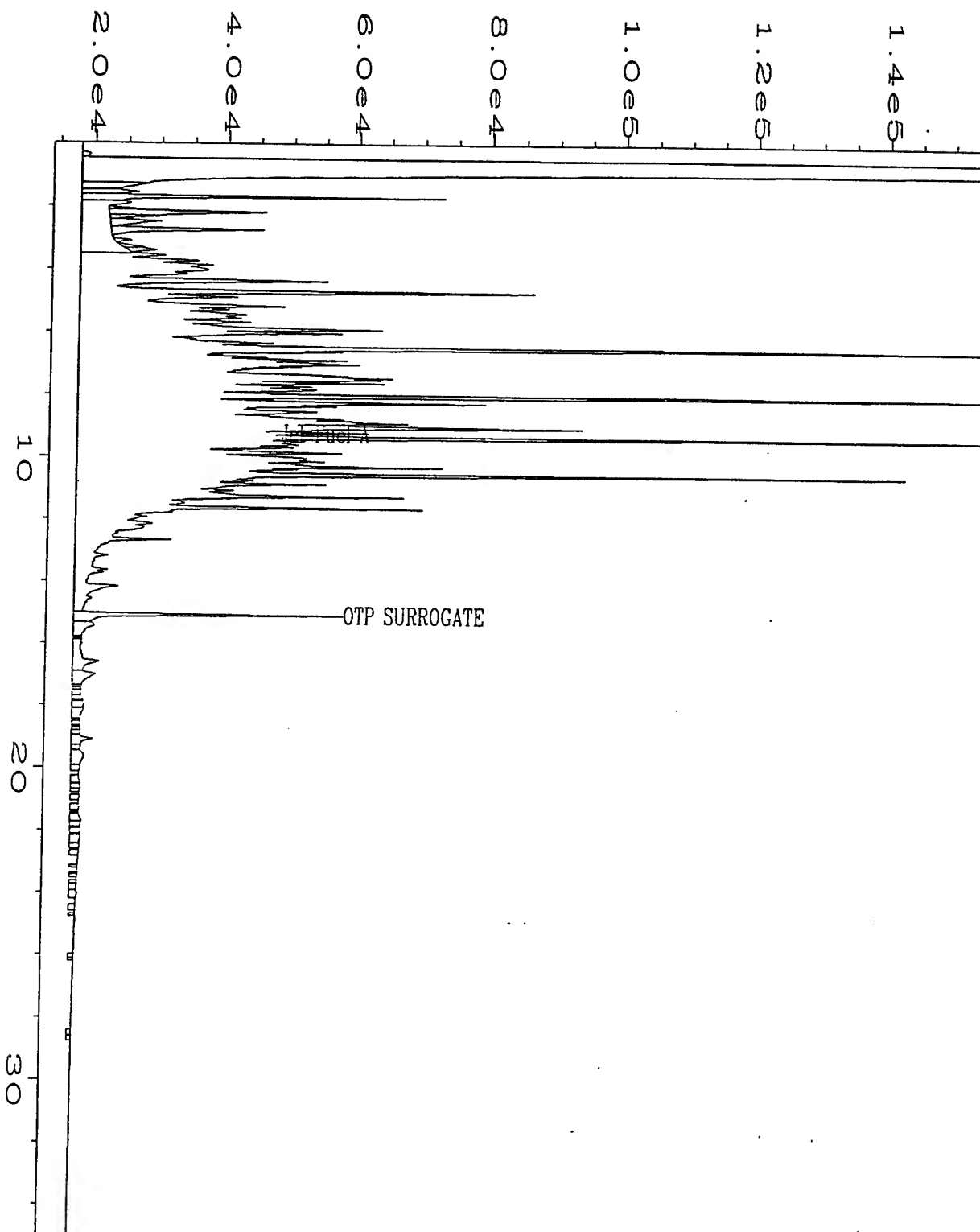
|                    |  |                    |             |
|--------------------|--|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\033R0101.D            | Page Number        | : 1         |
| Operator           | : Dawn N. Guildner                               | Vial Number        | : 33        |
| Instrument         | : TEH  | Injection Number   | : 1         |
| Sample Name        | : X05163 DF=1 <i>mfpm 4/24/95</i>                | Sequence Line      | : 1         |
| Run Time Bar Code: | <i>7</i>   | Instrument Method: | FID1BAST.M  |
| Acquired on        | : 19 Apr 95 12:25 PM                             | Analysis Method    | : JET0418.M |
| Report Created on: | 20 Apr 95 09:23 AM                               | Sample Amount      | : 0         |
| Last Recalib on    | : 18 APR 95 06:54 PM                             | ISTD Amount        | :           |
| Multiplier         | : 1  |                    |             |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-2 11.5-13.5 SOIL |                    |             |



|                    |   |                    |               |
|--------------------|---|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\055R0101.D       | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                          | Vial Number        | : 55          |
| Instrument         | : TEH                                       | Injection Number   | : 1           |
| Sample Name        | : X05764 DF=2 10 <i>injection</i> 5/11/95   | Sequence Line      | : 1           |
| Run Time Bar Code: |   | Instrument Method: | FID1BASE.MTH  |
| Acquired on        | : 20 Apr 95 12:23 PM                        | Analysis Method    | : JET0418.MTH |
| Report Created on: | 20 Apr 95 01:10 PM                          | Sample Amount      | : 0           |
| Last Recalib on    | : 18 APR 95 06:54 PM                        | ISTD Amount        | :             |
| Multiplier         | : 1   |                    |               |
| Sample Info        | : PROJECT # 95-1217 CLIENT # SS-3 9-11 SOIL |                    |               |



|                   |                                       |                   |              |
|-------------------|---------------------------------------|-------------------|--------------|
| Data File Name    | : C:\HPCHEM\2\DATA\teh0424\009R0101.D | Page Number       | : 1          |
| Operator          | : Dawn N. Guildner                    | Vial Number       | : 9          |
| Instrument        | : TEH                                 | Injection Number  | : 1          |
| Sample Name       | : sb042195                            | Sequence Line     | : 1          |
| Time Bar Code:    |                                       | Instrument Method | : FID1BA.M   |
| Acquired on       | : 24 Apr 95 06:53 PM                  | Analysis Method   | : JET0424.MT |
| Report Created on | : 25 Apr 95 02:28 PM                  | Sample Amount     | : 0          |
| Last Recalib on   | : 24 APR 95 04:23 PM                  | ISTD Amount       | :            |
| Multiplier        | : 1                                   |                   |              |



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\TEH0424\010R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 10           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : x05764 df=1 Dup                     | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 24 Apr 95 07:43 PM                  | Analysis Method   | : JET0424.MTH  |
| Report Created on: | 25 Apr 95 02:28 PM                    | Sample Amount     | : 0            |
| Last Recalib on    | : 24 APR 95 04:23 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

4/25/95

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL EXTRACTABLE HYDROCARBONS  
TEH Matrix Spike/Matrix Spike Duplicate Data Report

Client Sample No. : 95-MW-8 11-12' Client Project No. : 722450.26020/SEY  
Lab Sample No. : X05755 Lab Project No. : 95-1217  
Date Sampled : 4/12/95 EPA Method No. : 5030/MOD.8015  
Date Received : 4/14/95 Matrix : SOIL  
Date Prepared : 4/17/95 Method Blank : SB041795  
Date Analyzed : 4/19/95

| Compound | Spike Added (ug/mL) | Sample Concentration (ug/mL) | MS Concentration (ug/L) | MS %REC | QC Limits %REC |
|----------|---------------------|------------------------------|-------------------------|---------|----------------|
| Jet Fuel | 1000                | 99.3                         | 1050                    | 95      | 60-140         |

| Compound | Spike Added (ug/mL) | MSD Concentration (ug/mL) | MSD %REC | RPD | QC Limits |        |
|----------|---------------------|---------------------------|----------|-----|-----------|--------|
|          |                     |                           |          |     | RPD       | %REC   |
| Jet Fuel | 1000                | 1070                      | 97       | 2.1 | 50        | 60-140 |

\* = Values outside of QC limits.

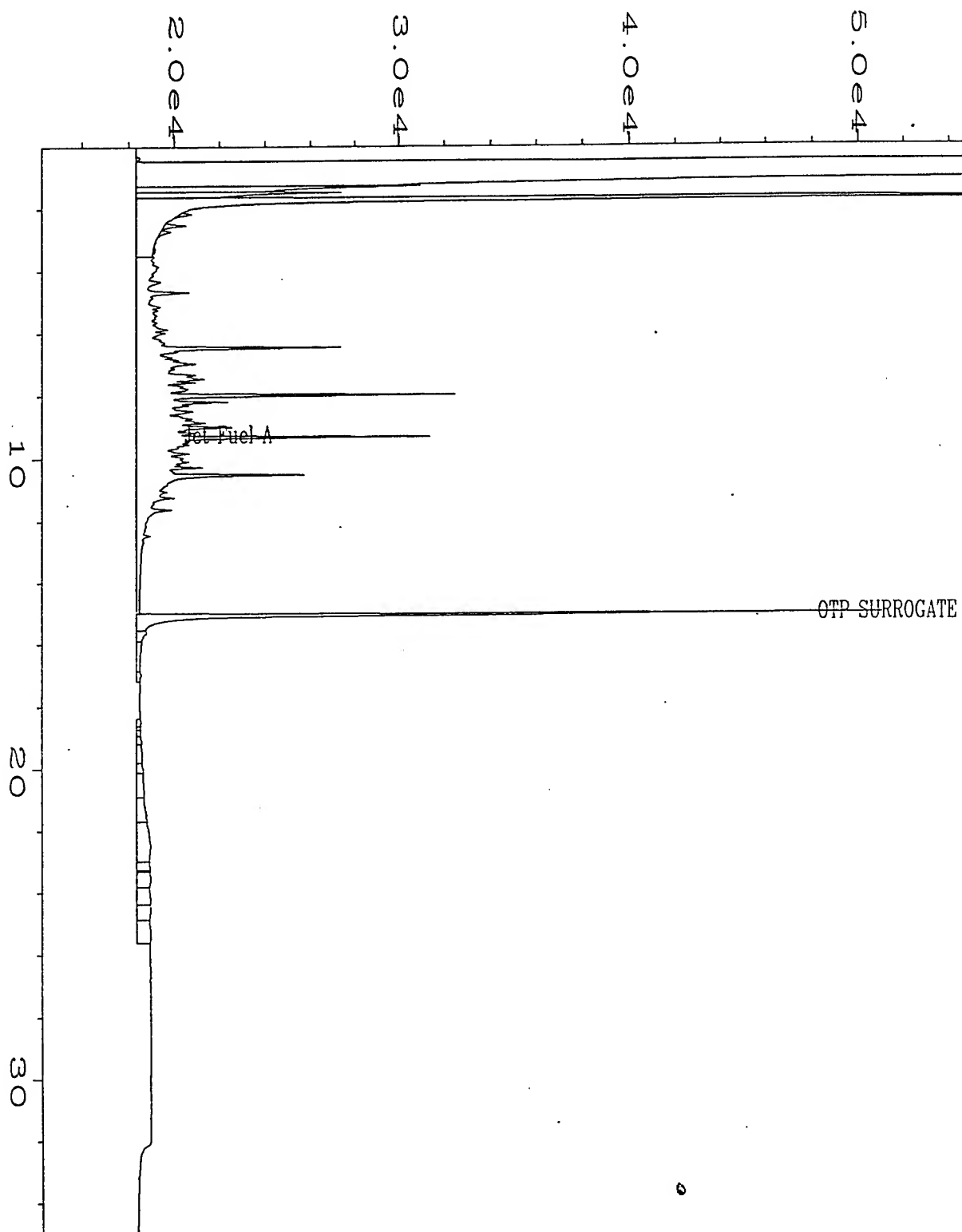
RPD: 0 out of (1) outside limits.

Spike Recovery: 0 out of (2) outside limits.

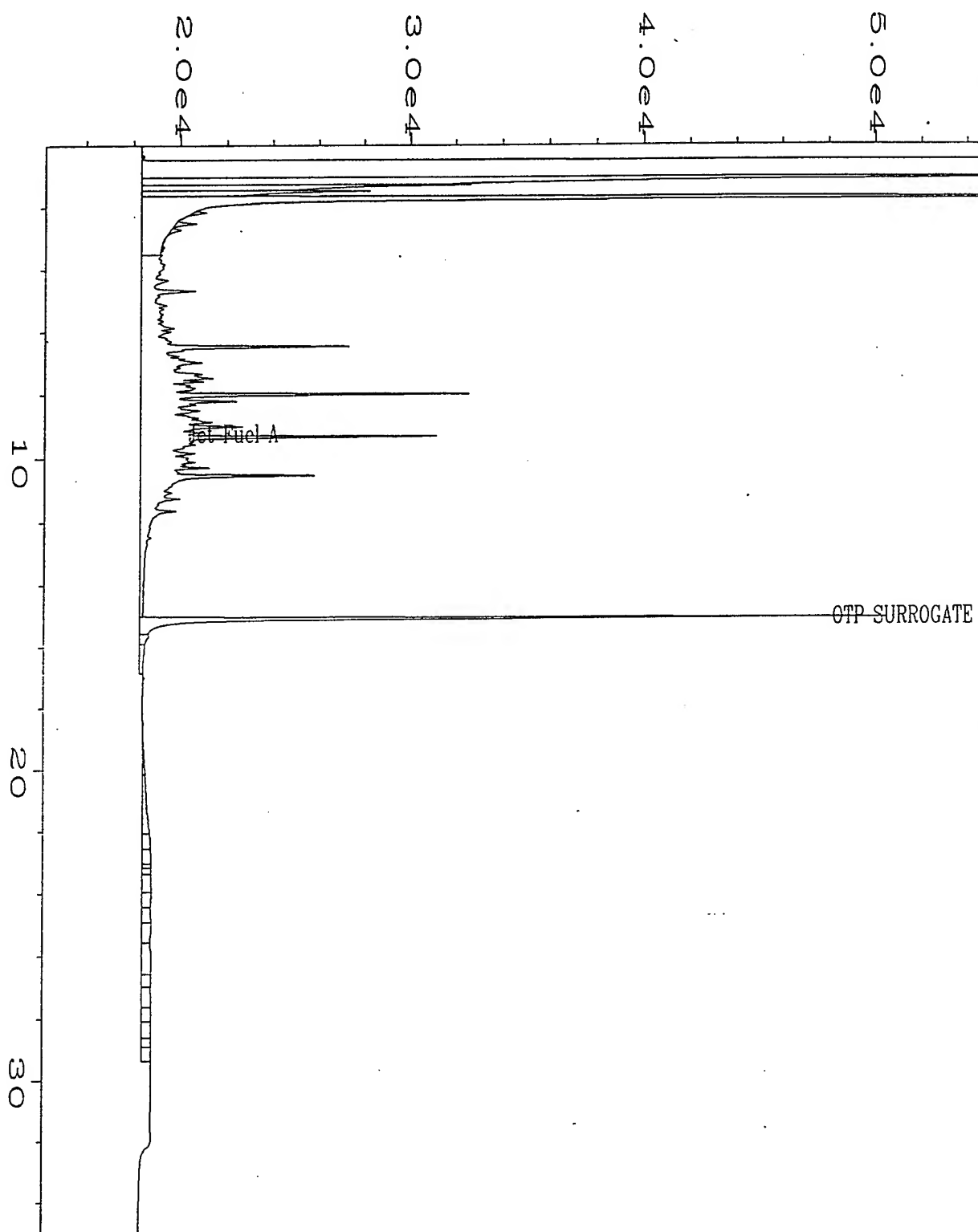
Comments: NA = Not analyzed/not applicable.

Values reported in ug/mL in the liquid extract.

*mjm 4/25/95*



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\023R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 23           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : X05755 MS                           | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 19 Apr 95 03:45 AM                  | Analysis Method   | : JET0418.MTH  |
| Report Created on: | : 19 Apr 95 10:17 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 18 APR 95 06:54 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |



|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\024R0101.D | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 24         |
| Instrument         | : TEH                                 | Injection Number   | : 1          |
| Sample Name        | : X05755 MSD                          | Sequence Line      | : 1          |
| Run Time Bar Code: |                                       | Instrument Method: | FID1BA.M     |
| Acquired on        | : 19 Apr 95 04:31 AM                  | Analysis Method    | : JET0418.MT |
| Report Created on: | 19 Apr 95 10:18 AM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 18 APR 95 06:54 PM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL EXTRACTABLE HYDROCARBONS (TEH)  
Laboratory Control Sample (LCS)

LCS Number : LCS041795      Matrix : SOIL  
Date Prepared : 4/17/95      Method Number : 5030/MOD.8015  
Date Analyzed : 4/19/95  
Sequence Number : JET21

| <u>Compound<br/>Name</u> | <u>Theoretical<br/>Concentration<br/>mg/L</u> | <u>LCS<br/>Concentration<br/>mg/ L</u> | <u>LCS<br/>%<br/>Recovery</u> | <u>QC Limit<br/>% Recovery</u> |
|--------------------------|---|--|-------------------------------|--------------------------------|
| JET FUEL                 | 1000  | 1120                                   | 112%                          | 70%-130%                       |

Surrogate Recovery: 99%


QUALIFIERS

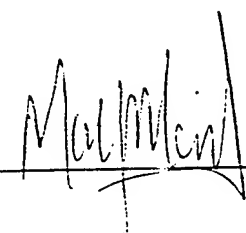
U = TEH analyzed for but not detected.

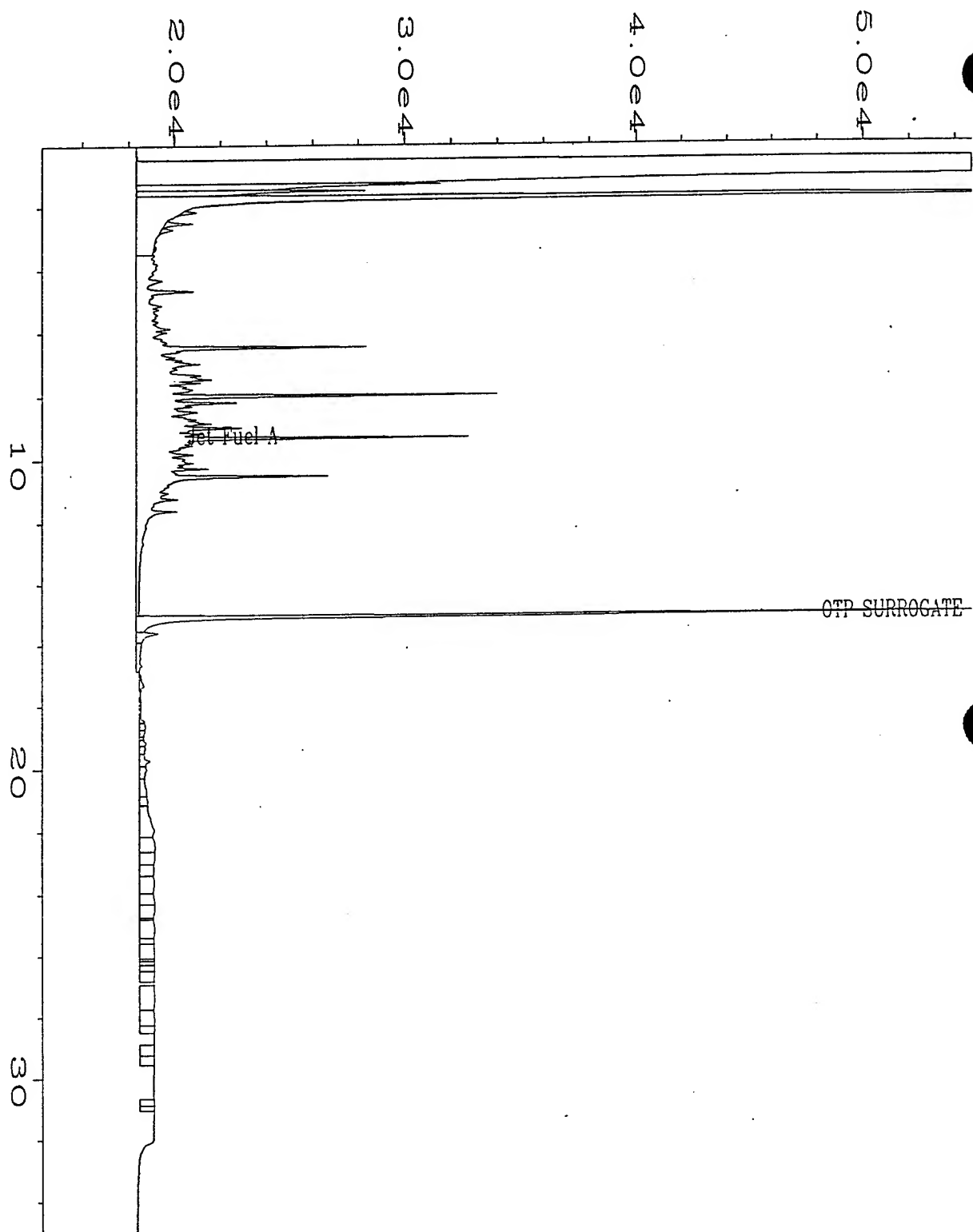
B = TEH found in blank as well as sample (blank data should be compared).

E = Extrapolated value.

NA = Not Available.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |                                       |                    |             |
|--------------------|---------------------------------------|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0418\021R0101.D | Page Number        | : 1         |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 21        |
| Instrument         | : TEH                                 | Injection Number   | : 1         |
| Sample Name        | : LCS041795                           | Sequence Line      | : 1         |
| Run Time Bar Code: |                                       | Instrument Method: | FID1B       |
| quired on          | : 19 Apr 95 02:12 AM                  | Analysis Method    | : JET0418.M |
| Report Created on: | 20 Apr 95 01:19 PM                    | Sample Amount      | : 0         |
| Last Recalib on    | : 18 APR 95 06:54 PM                  | ISTD Amount        | :           |
| Multiplier         | : 1                                   |                    |             |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303)425-6021

Miscellaneous Analyses

Date Sampled : 4/12/95 Client Project ID. : 722450.2602/  
Date Received : 4/14/95 Lab Project No. : 95-1217  
Date Prepared : 4/26/95 Detection limit : 25.0 mgCaCO<sub>3</sub>/L  
Date Analyzed : 4/26/95 Method : EPA 310.1

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Total Alkalinity*</u> mgCaCO <sub>3</sub> /k |
|-------------------------------|-----------------------------|---------------|---|
| X05753                        | MW-6 15-16'                 | Soil          | <33.0   |
| X05757                        | MW-10 10-11'                | Soil          | <32.0   |
| X05757 Dup                    | MW-10 10-11' Dup            | Soil          | <32.0   |
| Method Blank                  | 4/26/95                     |               | <5.00 (mg/L)                                    |

Quality Assurance

|                                       | <u>True Value<br/>(mgCaCO<sub>3</sub>/L)</u> | <u>Result<br/>(mgCaCO<sub>3</sub>/L)</u> | <u>%<br/>Recovery</u> |
|---------------------------------------|--|--|-----------------------|
| APG Minerals reference<br>Lot # 13862 | 11.85  | 11.78                                    | 99.3                  |

\* Results reported on a dry-weight basis.

Debra V. Byrum  
Analyst

[Signature]  
Approved

1217JJ.4

# HUFFMAN

LABORATORIES, INC.

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4630 Indiana Street • Golden, CO 80403

## NON-CLP ANALYSIS RESULTS

Date: 05/01/95  
Lab Name: Huffman Labs  
Contact: Sue Zeller  
Sample Matrix: soil

Client: Evergreen Analytical  
Contact: Patty McClellan  
Huffman Lab #: 160795

| Client Smp#     | Lab ID #        | Element/Compound | Dilution Factor | Results         | Units | Prep Date | Analysis Date | Sample Size (g) | Method #  | Ins     |
|-----------------|-----------------|------------------|-----------------|-----------------|-------|-----------|---------------|-----------------|-----------|---------|
| MW1(12-14)BLS   | 16079501        | TC               | NA              | 0.05            | %     | NA        | 04/27/95      | 0.374           | Leco CR12 |         |
| MW1(12-14)BLS   | 16079501        | TC               | NA              | 0.07            | %     | NA        | 04/27/95      | 0.325           | Leco CR12 |         |
| MW5(13-14.5)    | 16079502        | TC               | NA              | <0.05           | %     | NA        | 04/27/95      | 0.503           | Leco CR12 |         |
| MW6(16-16.5)    | 16079503        | TC               | NA              | 0.31            | %     | NA        | 04/27/95      | 0.540           | Leco CR12 |         |
| MW10(10-11)     | 16079504        | TC               | NA              | 0.09            | %     | NA        | 04/27/95      | 0.358           | Leco CR12 |         |
| MW11(11.5-13.5) | 16079505        | TC               | NA              | <0.05           | %     | NA        | 04/27/95      | 0.341           | Leco CR12 |         |
| MW1(12-14)BLS   | 16079501        | CC               | NA              | <0.02           | %     | NA        | 04/27/95      | 0.208           | COU-02    | t       |
| MW1(12-14)BLS   | 16079501        | CC               | NA              | <0.02           | %     | NA        | 04/27/95      | 0.380           | COU-02    | t       |
| MW5(13-14.5)    | 16079502        | CC               | NA              | <0.02           | %     | NA        | 04/27/95      | 0.158           | COU-02    | t       |
| MW6(16-16.5)    | 16079503        | CC               | NA              | <0.02           | %     | NA        | 04/27/95      | 0.120           | COU-02    | t       |
| MW10(10-11)     | 16079504        | CC               | NA              | <0.02           | %     | NA        | 04/27/95      | 0.237           | COU-02    | t       |
| MW11(11.5-13.5) | 16079505        | CC               | NA              | <0.02           | %     | NA        | 04/27/95      | 0.125           | COU-02    | t       |
| % moisture      |                 |                  |                 | adjusted result |       |           |               |                 |           |         |
| 95-1182         | MW1(12-14)BLS   | 16079501         | TOC             | NA              | 0.05  | %         | NA            | NA              | NA        | by calc |
|                 | MW1(12-14)BLS   | 16079501         | TOC             | NA              | 0.07  | %         | NA            | NA              | NA        | by calc |
|                 | MW5(13-14.5)    | 16079502         | TOC             | NA              | <0.05 | %         | NA            | NA              | NA        | by calc |
|                 | MW6(16-16.5)    | 16079503         | 36.04 TOC       | NA              | 0.31  | 0.48 %    | NA            | NA              | NA        | by calc |
| 9-1217          | MW10(10-11)     | 16079504         | 21.90 TOC       | NA              | 0.09  | 0.12 %    | NA            | NA              | NA        | by calc |
|                 | MW11(11.5-13.5) | 16079505         | 21.70 TOC       | NA              | <0.05 | 0.06 %    | NA            | NA              | NA        | by calc |

Samples analyzed and results reported on as as received basis.

Soil samples are not homogeneous.

As per client instructions, analytical aliquot taken from end of core tube.

Analytical aliquot is not thought to be representative of the entire sample.

Values reported below Detection Limits are for reference only.

TC detection limit = 0.05 %

CC detection limit = 0.02 %

TOC detection limit = 0.05 %

# HUFFMAN

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4630 Indiana Street • Golden, CO 80403

## NON-CLP ANALYSIS RESULTS

Date: 05/01/95

Lab Name: Huffman Labs

Contact: Sue Zeller

Sample Matrix: soil

Client: Evergreen Analytical

Contact: Patty McClellan

Huffman Lab #: 160795

| Client Smp#     | Lab ID # | Element/<br>Compound | Dilution<br>Factor | Results | Units | Prep<br>Date | Analysis<br>Date | Sample<br>Size (g) | Method<br># | Instrument<br>ID |
|-----------------|----------|----------------------|--------------------|---------|-------|--------------|------------------|--------------------|-------------|------------------|
| MW1(12-14)BLS   | 16079501 | TC                   | NA                 | 0.05    | %     | NA           | 04/27/95         | 0.374              | Leco CR12   | #7               |
| MW1(12-14)BLS   | 16079501 | TC                   | NA                 | 0.07    | %     | NA           | 04/27/95         | 0.325              | Leco CR12   | #7               |
| MW5(13-14.5)    | 16079502 | TC                   | NA                 | <0.05   | %     | NA           | 04/27/95         | 0.503              | Leco CR12   | #7               |
| MW6(16-16.5)    | 16079503 | TC                   | NA                 | 0.31    | %     | NA           | 04/27/95         | 0.540              | Leco CR12   | #7               |
| MW10(10-11)     | 16079504 | TC                   | NA                 | 0.09    | %     | NA           | 04/27/95         | 0.358              | Leco CR12   | #7               |
| MW11(11.5-13.5) | 16079505 | TC                   | NA                 | <0.05   | %     | NA           | 04/27/95         | 0.341              | Leco CR12   | #7               |
| MW1(12-14)BLS   | 16079501 | CC                   | NA                 | <0.02   | %     | NA           | 04/27/95         | 0.208              | COU-02      | tower            |
| MW1(12-14)BLS   | 16079501 | CC                   | NA                 | <0.02   | %     | NA           | 04/27/95         | 0.380              | COU-02      | tower            |
| MW5(13-14.5)    | 16079502 | CC                   | NA                 | <0.02   | %     | NA           | 04/27/95         | 0.158              | COU-02      | tower            |
| MW6(16-16.5)    | 16079503 | CC                   | NA                 | <0.02   | %     | NA           | 04/27/95         | 0.120              | COU-02      | tower            |
| MW10(10-11)     | 16079504 | CC                   | NA                 | <0.02   | %     | NA           | 04/27/95         | 0.237              | COU-02      | tower            |
| MW11(11.5-13.5) | 16079505 | CC                   | NA                 | <0.02   | %     | NA           | 04/27/95         | 0.125              | COU-02      | tower            |
| MW1(12-14)BLS   | 16079501 | TOC                  | NA                 | 0.05    | %     | NA           | NA               | NA                 | by calc     | NA               |
| MW1(12-14)BLS   | 16079501 | TOC                  | NA                 | 0.07    | %     | NA           | NA               | NA                 | by calc     | NA               |
| MW5(13-14.5)    | 16079502 | TOC                  | NA                 | <0.05   | %     | NA           | NA               | NA                 | by calc     | NA               |
| MW6(16-16.5)    | 16079503 | TOC                  | NA                 | 0.31    | %     | NA           | NA               | NA                 | by calc     | NA               |
| MW10(10-11)     | 16079504 | TOC                  | NA                 | 0.09    | %     | NA           | NA               | NA                 | by calc     | NA               |
| MW11(11.5-13.5) | 16079505 | TOC                  | NA                 | <0.05   | %     | NA           | NA               | NA                 | by calc     | NA               |

Samples analyzed and results reported on as as received basis.

Soil samples are not homogeneous.

As per client instructions, analytical aliquot taken from end of core tube.

Analytical aliquot is not thought to be representative of the entire sample.

Values reported below Detection Limits are for reference only.

TC detection limit = 0.05%

CC detection limit = 0.02%

TOC detection limit = 0.05%

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## NON-CLP ANALYSIS RESULTS

### LABORATORY CONTROL STANDARD

Date: 05/01/95  
Lab Name: Huffman Labs  
Contact: Sue Zeller

Client: Evergreen Analytical  
Contact: Patty McClellan  
Huffman Lab #: 160795

### LABORATORY CONTROL STANDARD

| Lab ID # | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|----------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| LCS      | BN 4851 | TC                   | 3.35          | 3.39           | 101 | %     | 04/27/95 | Leco CR12   | #7               |
| LCS      | BN 4056 | CC                   | 11.33         | 11.34          | 100 | %     | 04/27/95 | COU-02      | tower            |
| LCS      | BN 4056 | CC                   | 11.33         | 11.46          | 101 | %     | 04/28/95 | COU-02      | tower            |

### SPIKE RECOVERY

| Lab ID #  | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|-----------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| SPIKE     | BN 4712 | TC                   | 12600         | 12482          | 99  | ug C  | 04/27/95 | Leco CR12   | #7               |
| SPIKE DUP | BN 4712 | TC                   | 12120         | 12076          | 100 | ug C  | 04/27/95 | Leco CR12   | #7               |
| SPIKE     | BN 4712 | CC                   | 525           | 529            | 101 | ug C  | 04/28/95 | COU-02      | tower            |
| SPIKE DUP | BN 4712 | CC                   | 737           | 729            | 99  | ug C  | 04/28/95 | COU-02      | tower            |

PD = Prep date

# HUFFMAN

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## NON-CLP QA/QC ANALYSIS RESULTS INITIAL AND CONTINUING CALIBRATION VERIFICATION

Date: 05/01/95  
Lab Name: Huffman Labs  
Contact: Sue Zeller  
Client: Evergreen Analytical  
Contact: Patty McClellan  
Huffman Lab #: 160795

### INITIAL CALIBRATION

| Lab ID # | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|----------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| ICS      | BN 4712 | TC                   | 12.00         | 11.91          | 99  | %     | 04/27/95 | Leco CR12   | #7               |
| ICS      | BN 4712 | CC                   | 12.00         | 11.95          | 100 | %     | 04/27/95 | COU-02      | tower            |
| ICS      | BN 4712 | CC                   | 12.00         | 12.04          | 100 | %     | 04/28/95 | COU-02      | tower            |

Slope =

NA

Intercept =

NA

95% Correlation Coefficient =

NA

Single point calibrations for this test.

### CONTINUING CALIBRATION VERIFICATION

| Lab ID # | Source  | Element/<br>Compound | True<br>Value | Found<br>Value | % R | Units | Date     | Method<br># | Instrument<br>ID |
|----------|---------|----------------------|---------------|----------------|-----|-------|----------|-------------|------------------|
| CCS      | BN 4712 | TC                   | 12.00         | 11.98          | 100 | %     | 04/27/95 | Leco CR12   | #7               |
| CCS      | BN 4712 | TC                   | 12.00         | 11.94          | 100 | %     | 04/27/95 | Leco CR12   | #7               |
| CCS      | BN 4712 | CC                   | 12.00         | 12.11          | 101 | %     | 04/27/95 | COU-02      | tower            |
| CCS      | BN 4712 | CC                   | 12.00         | 12.17          | 101 | %     | 04/28/95 | COU-02      | tower            |

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**BALANCE # 19**

BN 485)

7/27/93

LABORATORIES, INC.

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|            |                     |              |            |
|------------|---------------------|--------------|------------|
| ANALYSIS   | CARBONATE<br>CARBON | METHOD       | SOP COU-02 |
| ANALYZER # | 6                   | COULOMETER # |            |
| BALANCE #  | 12                  |              | 3          |

|   |                  |                     |  |                  |                      |
|---|------------------|---------------------|--|------------------|----------------------|
| CALCIUM CARBONATE<br>(STD #333) $\text{CaCO}_3$ | BOTTLE #<br>4712 | % C THEORY = 12.00% | SODIUM CARBONATE<br>$\text{Na}_2\text{CO}_3$ | BOTTLE #<br>2730 | % C THEORY = 11.33 % |
|---|------------------|---------------------|--|------------------|----------------------|

| SAMPLE NO.              | TARE WT. GRAMS | TARE + SAMPLE WT. | SAMPLE WT. GRAMS | NOTES                                | COUNTS $\mu$ GRAMS | LESS BLANK $\bar{x}$ | % CARBON AS CARBONATE CARBON | QC   | % RECOVERY |
|-------------------------|----------------|-------------------|------------------|--------------------------------------|--------------------|----------------------|------------------------------|------|------------|
|                         |                |                   |                  |                                      |                    |                      |                              |      |            |
| BL                      |                |                   |                  |                                      | 6.8                |                      |                              | IB   |            |
| BL                      |                |                   |                  |                                      | 8.6                |                      |                              | MB   |            |
| BL                      |                |                   |                  |                                      | 8.5                |                      |                              | MB   |            |
| $\text{H}_2\text{CO}_3$ | 0.850016       | 0.856541          | 0.006525         |                                      | 748.0              | 740.0                | 11.34                        | ICS  | 100.09     |
| $\text{CaCO}_3$         | 0.863424       | 0.868667          | 0.005243         |                                      | 633.6              | 625.6                | 11.95                        | LCSK | 99.6       |
| 160701                  | 0.941366       | 1.149121          | 0.207755         | (NH)                                 | 8.0                | 0                    | 0                            |      | 0          |
| 160701                  | 0.898693       | 1.278806          | 0.380113         | (NH) 3 Sp. to Acid<br>2 Sp. to Clock | 11.1               | 3.1                  | 0.0000051                    |      | ~0         |
| 160702                  | 0.873199       |                   |                  | (NH) Dropped Bot                     |                    |                      |                              |      |            |
| 0702                    | 0.912632       | 1.070765          | 0.157933         | (NH)                                 | 8.9                | .9                   | 0.0000056                    |      | ~0         |
| 160703                  | 0.886964       | 1.007451          | 0.120487         | (NH)                                 | 7.9                | 0                    | 0                            |      | ~0         |
| 160704                  | 0.876686       | 1.114147          | 0.237461         | (NH)                                 | 9.1                | 1.1                  | 0.0000046                    |      | ~0         |
| 160705                  | 0.838101       | 0.963910          | 0.125809         | (NH)                                 | 7.8                | 0                    | 0                            |      | ~0         |
| $\text{CaCO}_3$         | 0.847686       | 0.853324          | 0.005638         |                                      | 690.9              | 682.9                | 12.11                        | CCS  | 100.9      |

o m. l.

DATE \_\_\_\_\_

4-27-95

REVIEWED

 $\frac{5}{2}$ 

DATE \_\_\_\_\_

4/28/95

PAGE / OF /

RE:USED 120033

4630 Indiana Street • Golden, CO 80403

|                               |                        |                       |               |                           |
|-------------------------------|------------------------|-----------------------|---------------|---------------------------|
| ANALYST<br><i>John Miller</i> | DATE<br><i>7-28-95</i> | REVIEWED<br><i>JK</i> | <i>6/1/95</i> | PAGE <i>1</i> OF <i>2</i> |
|-------------------------------|------------------------|-----------------------|---------------|---------------------------|

REVISED 12/20/93

# Evergreen Analytical Sample Log Sheet

Project # 95-1240

Date(s) Sampled: 04/17/95 COC

Date Due: 04/21-BTEX,TVH,  
05/02-OTHERS

Date Received: 04/18/95 1030

Holding Time(s): 04/19-NO<sub>2</sub>,NO  
05/01-BTEX,TVH,TEH,ALKALINI  
Rush STANDARD

Client Project I.D. 722450.2602/SJAFB

Client: Parsons Engineering Science, Inc.

Shipping Charges 5.00

Address: 1700 Broadway Suite 900  
Denver, CO 80290

E.A. Cooler # N/A

Airbill # FED EX 4616481811

Contact: TODD WIEDEMEIER

Custody Seal Intact? N/A  
Cooler      Bottles     

Client P.O.                     

COC Present Y

Sample Tags Present? Y

Sample Tags Listed? Y

Sample(s) Sealed? Y

Phone #831-8100 Fax #831-8208

## Special Invoicing/Billing

Special Instructions ★ ALL BTEX AND VOA SAMPLES ARE TO INCLUDE CHLOROBENZENE  
TMB AND TMB. ✓ PLUS MTBE, EDB, ISOPROPYL ETHER, CHLOROBENZENE,  
1,2-DICHLOROBENZENE, 1,3-DICHLOROBENZENE, 1,4-DICHLOROBENZENE,  
DICHLORODIFLOUROMETHANE AND TRICHLOROFLOUROMETHANE. DID NOT RECEIVE SAMPLES  
MW-6, CPT-16 FOR ALKALINITY.

| #         | Client ID# | Analysis    | Mtx | Btl | Loc |
|-----------|------------|-------------|-----|-----|-----|
| X05832L-N | MW-11      | ★ ✓ VOA 624 | W   | 40V | 9   |
| X05829A/B | MW-6       | ★ BTEX 602  | W   | 40V | 2   |
| X05830A/B | MW-7       | ★ BTEX 602  | W   | 40V | 2   |
| X05831A/B | MW-10      | ★ BTEX 602  | W   | 40V | 2   |
| X05832A/B | MW-11      | ★ BTEX 602  | W   | 40V | 2   |
| X05834A/B | CPT-16     | ★ BTEX 602  | W   | 40V | 2   |
| X05833A/B | TRIP BLANK | ★ BTEX 602  | W   | 40V | 2   |
| X05829C/D | MW-6       | TVH         | W   | 40V | 2   |
| X05830C/D | MW-7       | TVH         | W   | 40V | 2   |
| X05831C/D | MW-10      | TVH         | W   | 40V | 2   |
| X05832C/D | MW-11      | TVH         | W   | 40V | 2   |
| X05834C/D | CPT-16     | TVH         | W   | 40V | 2   |
| X05829E   | MW-6       | TEH JET     | W   | 1LA | D4  |
| X05830E   | MW-7       | TEH JET     | W   | 1LA | D4  |

R=Sample to be returned

GC/MS 2 GC 4 Metals      Wet Chem 2 SxPrep 1 Acct 1  
SxRec C QA/QC C Sales C File Orig

| Lab<br>ID # | Client<br>ID# | Analysis   | Mtx | Btl  | Loc |
|-------------|---------------|--|-----|------|-----|
| X05831E     | MW-10         | TEH JET  | W   | 1LA  | D4  |
| 5832E       | MW-11         | TEH JET  | W   | 1LA  | D4  |
| X05834E     | CPT-16        | TEH JET  | W   | 1LA  | D4  |
| X05829F-I   | MW-6          | METHANE  | W   | 1LA  | D4  |
| X05830F-I   | MW-7          | METHANE  | W   | 1LA  | D4  |
| X05831F-I   | MW-10         | METHANE  | W   | 1LA  | D4  |
| X05832F-I   | MW-11         | METHANE  | W   | 1LA  | D4  |
| X05834F-I   | CPT-16        | METHANE  | W   | 1LA  | D4  |
| X05829J     | MW-6          | ANIONS-Cl, SO <sub>4</sub> <sup>-2</sup> , NO <sub>2</sub> , NO <sub>3</sub> | W   | 125P | D4  |
| X05831J     | MW-10         | ANIONS-Cl, SO <sub>4</sub> <sup>-2</sup> , NO <sub>2</sub> , NO <sub>3</sub> | W   | 125P | D4  |
| X05830J     | MW-7          | ANIONS-SO <sub>4</sub> <sup>-2</sup> , NO <sub>2</sub> , NO <sub>3</sub>     | W   | 125P | D4  |
| X05832J     | MW-11         | ANIONS-SO <sub>4</sub> <sup>-2</sup> , NO <sub>2</sub> , NO <sub>3</sub>     | W   | 125P | D4  |
| X05834J     | CPT-16        | ANIONS-SO <sub>4</sub> <sup>-2</sup> , NO <sub>2</sub> , NO <sub>3</sub>     | W   | 125P | D4  |
| X05830K     | MW-7          | ALKALINITY   | W   | 1LA  | D4  |
| X05831K     | MW-10         | ALKALINITY   | W   | 1LA  | D4  |
| X05832K     | MW-11         | ALKALINITY   | W   | 1LA  | D4  |

Page 2 of 2 Pages

Project # 95-1240

Sample to be returned

PROJECT SPECIAL INSTRUCTIONS

95-  
~~94~~ 1240

Date: 4/18 EAL Contact: Patty Client Contact: Jedd Wiedern  
Parsons E.S.

INSTRUCTIONS:

Please remove MTBE from BTEX analysis  
for samples X05829 through X05834.

X05832 Please analyze Method 624 +  
MTBE, EDB, isopropyl ether, chlorobenzene,  
1,2-dichlorobenzene, 1,3-DCB, 1,4-DCB,  
dichlorodifluoromethane and trichlorofluoromethane.

Please take these samples off HOLD.  
00

Date & Time Rec'd: 4/18/95 1030 Shipped Via: Fed Ex 461648  
(Airbill # if applicable)

Client: Parsons ES&E

Client Project ID(s): 722450, 2602

EAL Project #(s): 95-1240

EAL Cooler(s):

Y

N

Cooler#

Client

Ice packs

Y

N

Y

N

Y

N

Y

N

Y

N

Temperature °C

3°

Y

N

N/A

1. Custody seal(s) present:

Seals on cooler intact

Seals on bottle intact

2. Chain of Custody present:

3. Containers broken or leaking:

(Comment on COC if Y)

4. Containers labeled:

5. COC agrees w/ bottles received:

(Comment on COC if N)

6. COC agrees w/ labels:

(Comment on COC if N)

7. Headspace in VOA vials-waters only

(comment on COC if Y)

8. VOA samples preserved:

9. pH measured on metals, cyanide or phenolics\*:

List discrepancies

\*Non-EAL provided containers only, water samples only.

10. Metal samples present:

Total \_\_\_\_\_, Dissolved \_\_\_\_\_

D or PD to be filtered:

T, TR, D, PD to be Preserved:

11. Short holding times:

Specify parameters

12. Multi-phase sample(s) present:

13. COC signed w/ date/time:

Comments: MW-6 and CPT-16 for alkalinity missing. pm 4/18/95

(Additional comments on back)

Custodian Signature/Date:

Lee Connor 4/18/95

# CHAIN OF CUSTODY RECORD / ANALYTICAL SERVICES REQUEST

Page 1 of 1

## Evergreen Analytical Inc.

4036 Youngfield St.  
Wheat Ridge, Colorado 80033  
(303) 425-6021  
FAX (303) 425-6854  
(800) 845-7400

COMPANY Parsons ES  
ADDRESS 401 Harrison Oaks Blvd Suite 210  
CITY Carly STATE NC ZIP 27573  
PHONE# (919) 677-0080 FAX (919) 677-0118

CLIENT CONTACT (print)

PROJECT I.D. 7-22482, Z602

EAL QUOTE # \_\_\_\_\_ P.O.# \_\_\_\_\_

TURNAROUND REQUIRED\*

\*expedited turnaround subject to additional fee

Sampler Name: Michael K. Baskett  
(signature) Michael K. Baskett  
(print) MICHAEL K BASKETT

Evergreen Analytical Cooler No. \_\_\_\_\_  
Cooler Received \_\_\_\_\_

### PRINT

Please all information:

CLIENT SAMPLE IDENTIFICATION DATE SAMPLED TIME

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|------|---------|------|----|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Instructions:

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report  
Method Blank Report

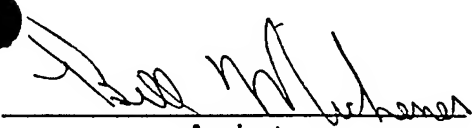
|                     |            |                    |                     |
|---------------------|------------|--------------------|---------------------|
| Method Blank Number | : MB042095 | Client Project No. | : 722450.2602/SJAFB |
| Date Prepared       | : 4/20/95  | Lab Project No.    | : 95-1240           |
| Date Analyzed       | : 4/20/95  | Dilution Factor    | : 1.00              |
|                     |            | Method             | : 602/8020          |
|                     |            | Matrix             | : Water             |
|                     |            | Lab File No.       | : BX2042009         |


| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 107%                         | 70%-130% (QC limits) |

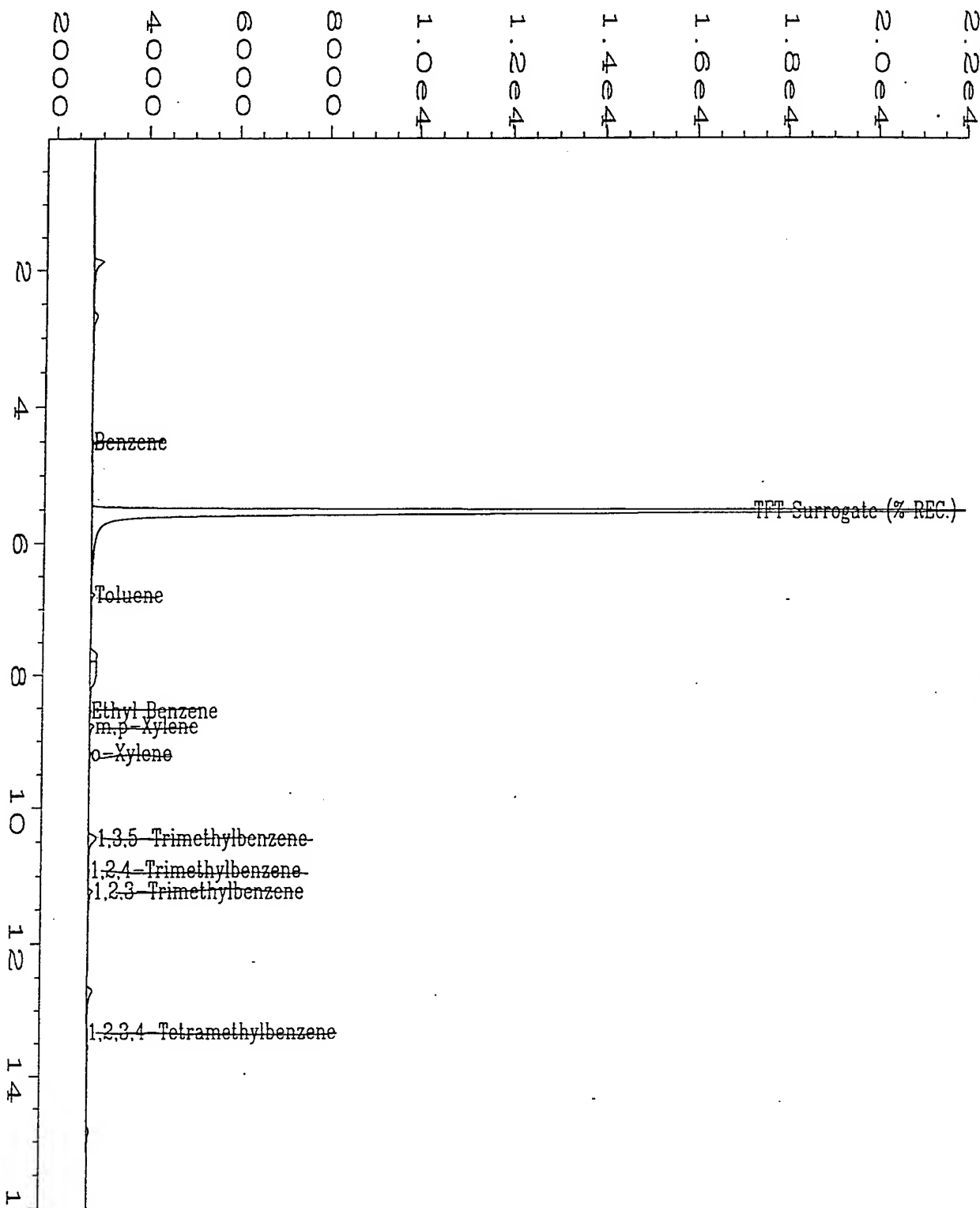
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\009R0101.D | Page Number        | : 1           |
| Operator           | : KAPRIE S. CONE                      | Vial Number        | : 9           |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : MB042095                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | : BX20420.MTH |
| Recorded on        | : 20 Apr 95 06:19 PM                  | Analysis Method    | : BX20420.MTH |
| Report Created on: | : 21 Apr 95 01:21 PM                  | Sample Amount      | : 0           |
| Last Recalib on    | : 20 Apr 95 05:30 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

*DM 5/10/95*

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

Method 602 Data Report  
Method Blank Report

Method Blank Number : MB042195  
Date Prepared : 4/21/95  
Date Analyzed : 4/21/95

Client Project No. : 722450.2602/SJAFB  
Lab Project No. : 95-1240  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042110

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 100%                         | 70%-130% (QC limits) |

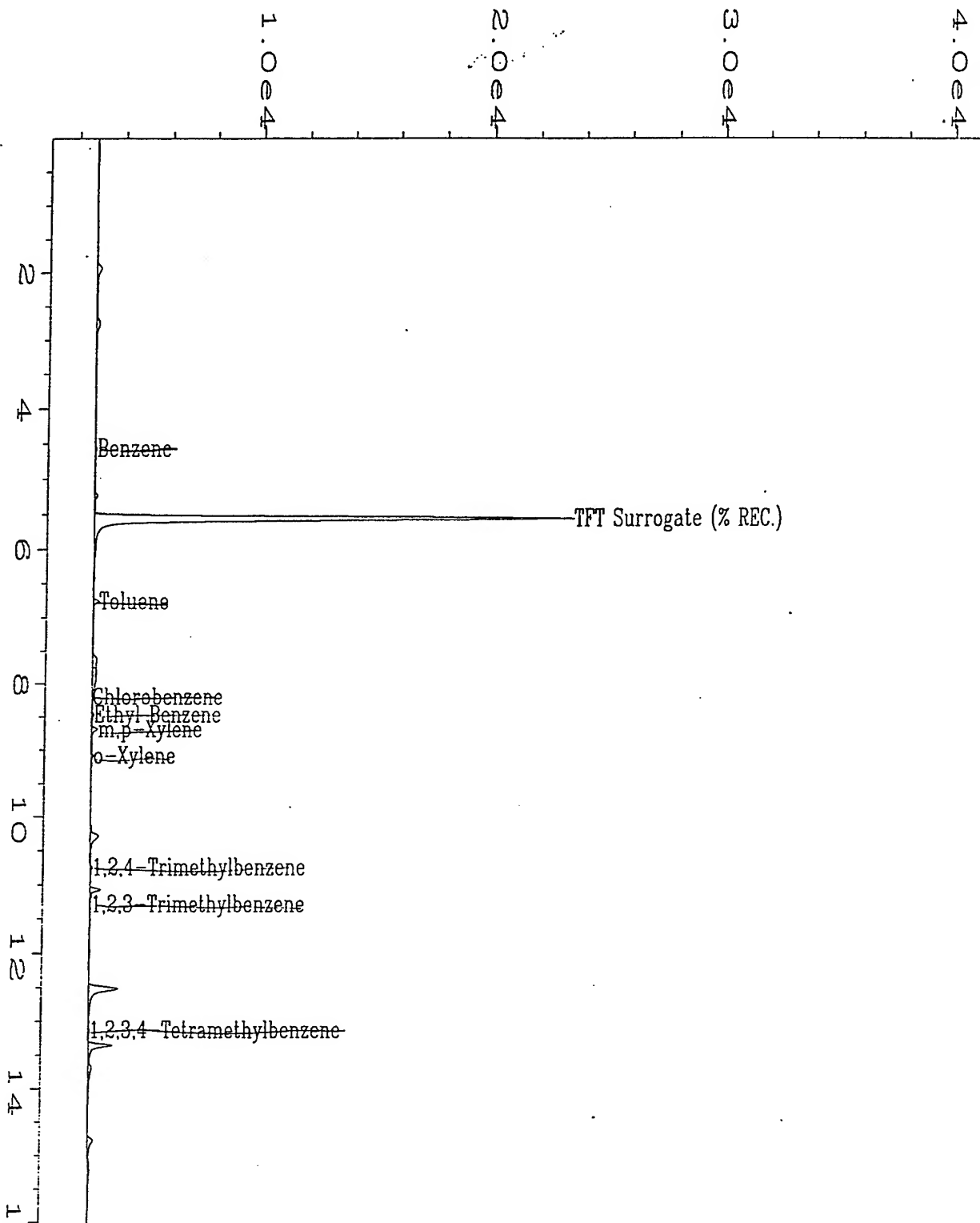
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



user modified

|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\010R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 10          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : MB042195                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Acquired on        | : 21 Apr 95 03:07 PM                  | Analysis Method    | : BX20421.MTH |
| Report Created on: | 21 Apr 95 03:29 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

pm 5/10/95

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Method 602 Data Report  
Method Blank Report

|                     |            |                    |                     |
|---------------------|------------|--------------------|---------------------|
| Method Blank Number | : MB042395 | Client Project No. | : 722450.2602/SJAFB |
| Date Prepared       | : 4/23/95  | Lab Project No.    | : 95-1240           |
| Date Analyzed       | : 4/23/95  | Dilution Factor    | : 1.00              |
|                     |            | Method             | : 602/8020          |
|                     |            | Matrix             | : Water             |
|                     |            | Lab File No.       | : BX1042310         |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 92%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

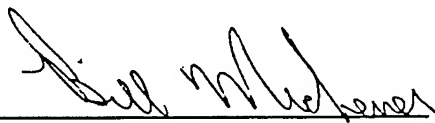
E = Extrapolated value.

U = Compound analyzed for, but not detected.

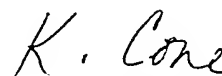
B = Compound also found in the blank.

RL = Reporting Limit.

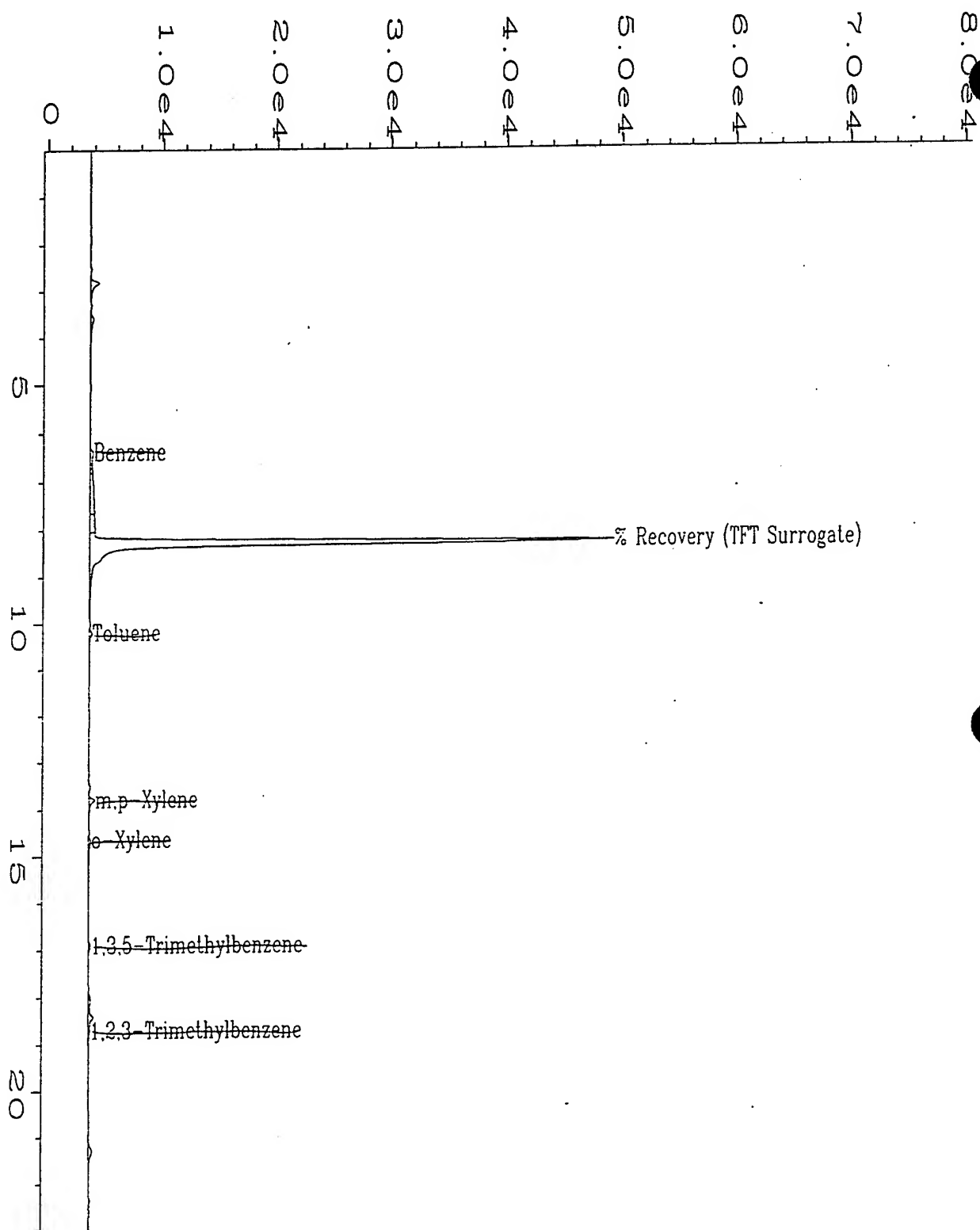
NA = Not Available/Not Applicable.



Analyst



Approved



user modified

Data File Name : E:\1\DATA\BX10423\010F0901.D  
 Operator : SW Tyson  
 Instrument : BTEX1  
 Sample Name : MB042395  
 Run Time Bar Code:  
 Acquired on : 23 Apr 95 02:42 PM  
 Report Created on: 25 Apr 95 01:07 PM  
 Last Recalib on : 24 APR 95 10:52 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 10  
 Injection Number : 1  
 Sequence Line : 9  
 Instrument Method: BX10423.MT  
 Analysis Method : BX10423.MT  
 Sample Amount : 0  
 ISTD Amount :

one 5/10/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |           |                    |                     |
|----------------------|-----------|--------------------|---------------------|
| Client Sample Number | : MW-6    | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05829  | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95 | Dilution Factor    | : 1.00              |
| Date Received        | : 4/18/95 | Method             | : 602               |
| Date Prepared        | : 4/20/95 | Matrix             | : Water             |
| Date Analyzed        | : 4/20/95 | Lab File No.       | : BX2042010         |
|                      |           | Method Blank No.   | : MB042095          |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 25                           | 0.4                  |
| Toluene   | 108-88-3                          | 1.0                          | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 108%                         | 70%-130% (QC limits) |

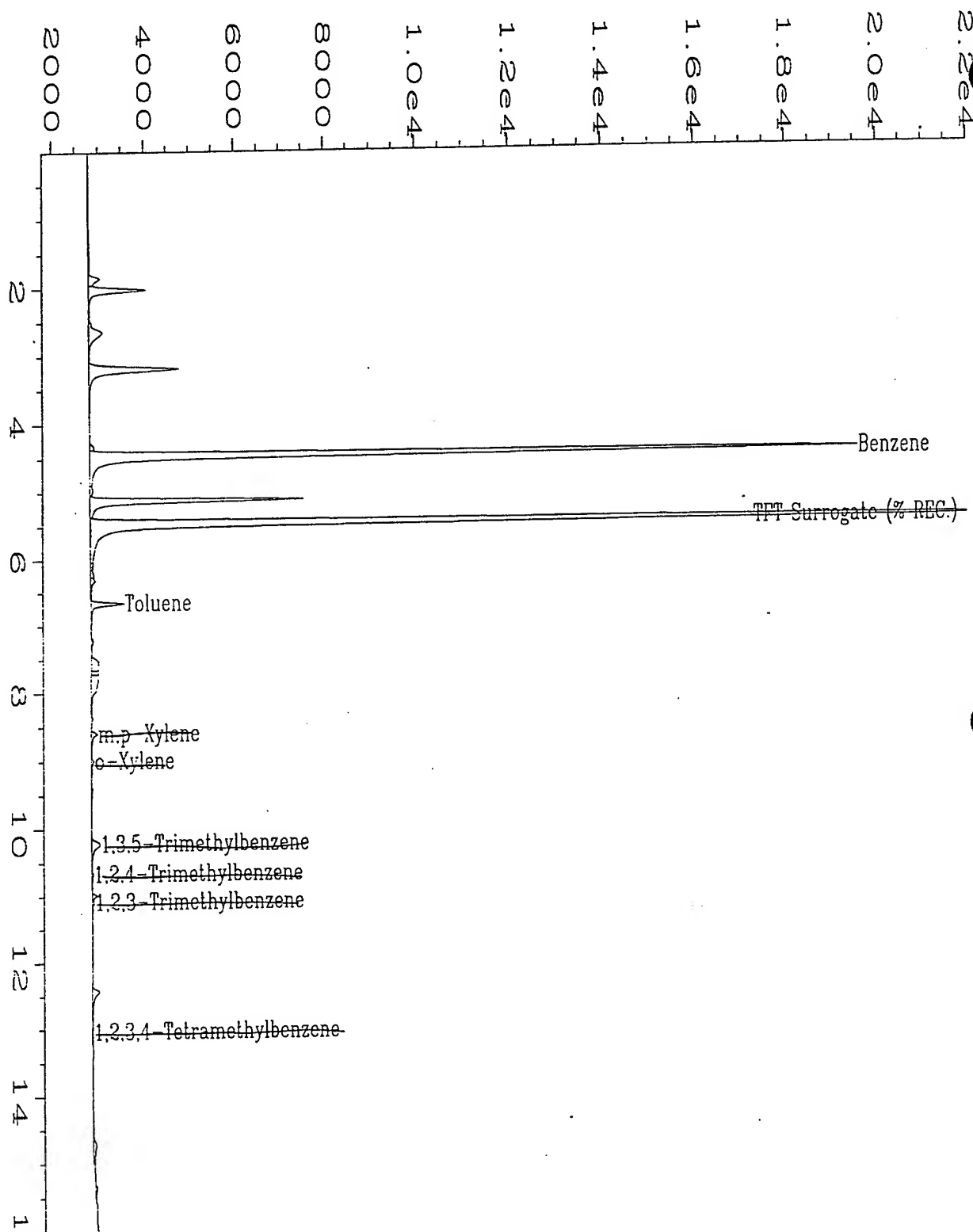
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

K. Cone  
Analyst

AmcCella  
Approved



|                      |                                       |                   |              |
|----------------------|---------------------------------------|-------------------|--------------|
| Data File Name       | : C:\HPCHEM\2\DATA\BX20420\010R0101.D | Page Number       | : 1          |
| Operator             | : KAPRIE S. CONE                      | Vial Number       | : 10         |
| Instrument           | : BTEX2                               | Injection Number  | : 1          |
| Sample Name          | : X05829;1;5                          | Sequence Line     | : 1          |
| Print Time Bar Code: |                                       | Instrument Method | : BX20420.MT |
| Printed on           | : 20 Apr 95 06:55 PM                  | Analysis Method   | : BX20420.MT |
| Report Created on:   | : 20 Apr 95 07:11 PM                  | Sample Amount     | : 0          |
| Last Recalib on      | : 20 APR 95 05:30 PM                  | ISTD Amount       | :            |
| Multiplier           | : 1                                   |                   |              |
| Sample Info          | : 95-1240; MW-6; 5 ML WATER           |                   |              |

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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |              |                    |                     |
|----------------------|--------------|--------------------|---------------------|
| Client Sample Number | : MW-6       | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05829 Dup | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95    | Dilution Factor    | : 1.00              |
| Date Received        | : 4/18/95    | Method             | : 602               |
| Date Prepared        | : 4/20/95    | Matrix             | : Water             |
| Date Analyzed        | : 4/20/95    | Lab File No.       | : BX2042013         |
|                      |              | Method Blank No.   | : MB042095          |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 23                           | 0.4                  |
| Toluene   | 108-88-3                          | 1.0                          | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 98%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

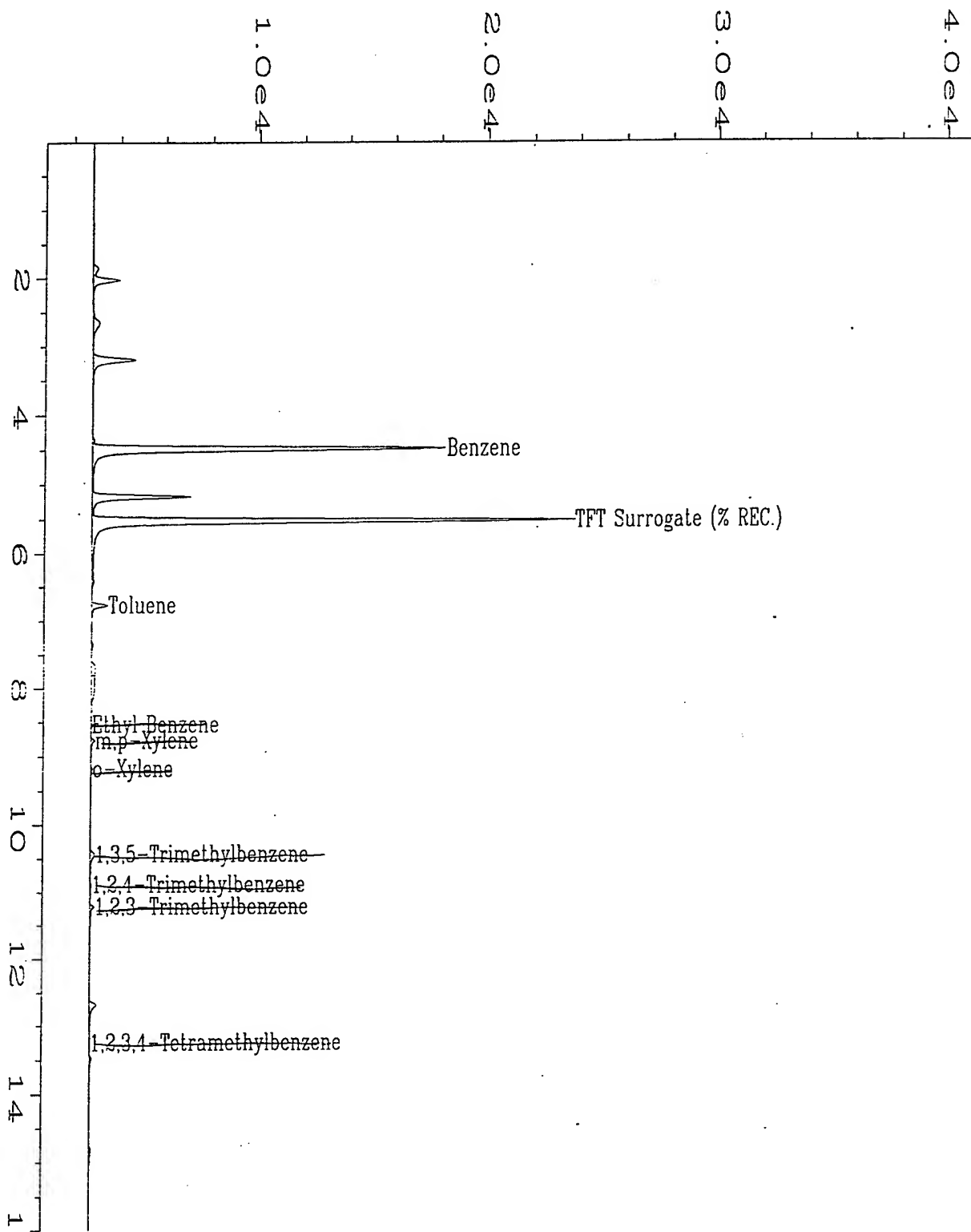
B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\013R0101.D | Page Number       | : 1           |
| Operator           | : KAPRIE S. CONE                      | Vial Number       | : 13          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05829DUP;1;5                       | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20420.MTH |
| Acquired on        | : 20 Apr 95 08:41 PM                  | Analysis Method   | : BX20420.MTH |
| Report Created on: | : 21 Apr 95 01:20 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 20 Apr 95 05:30 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |           |                    |                     |
|----------------------|-----------|--------------------|---------------------|
| Client Sample Number | : MW-7    | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05830  | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95 | Dilution Factor    | : 1.00              |
| Date Received        | : 4/18/95 | Method             | : 602               |
| Date Prepared        | : 4/20/95 | Matrix             | : Water             |
| Date Analyzed        | : 4/20/95 | Lab File No.       | : BX2042014         |
|                      |           | Method Blank No.   | : MB042095          |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                           | 0.4                  |
| Toluene   | 108-88-3                          | 11.0                         | 0.4                  |
| Chlorobenzene   | 108-90-7                          | 0.8                          | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | **                           | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 7.6                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 8.7                          | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 30                           | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 9.8                          | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 105%                         | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042111 (DF = 5).

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

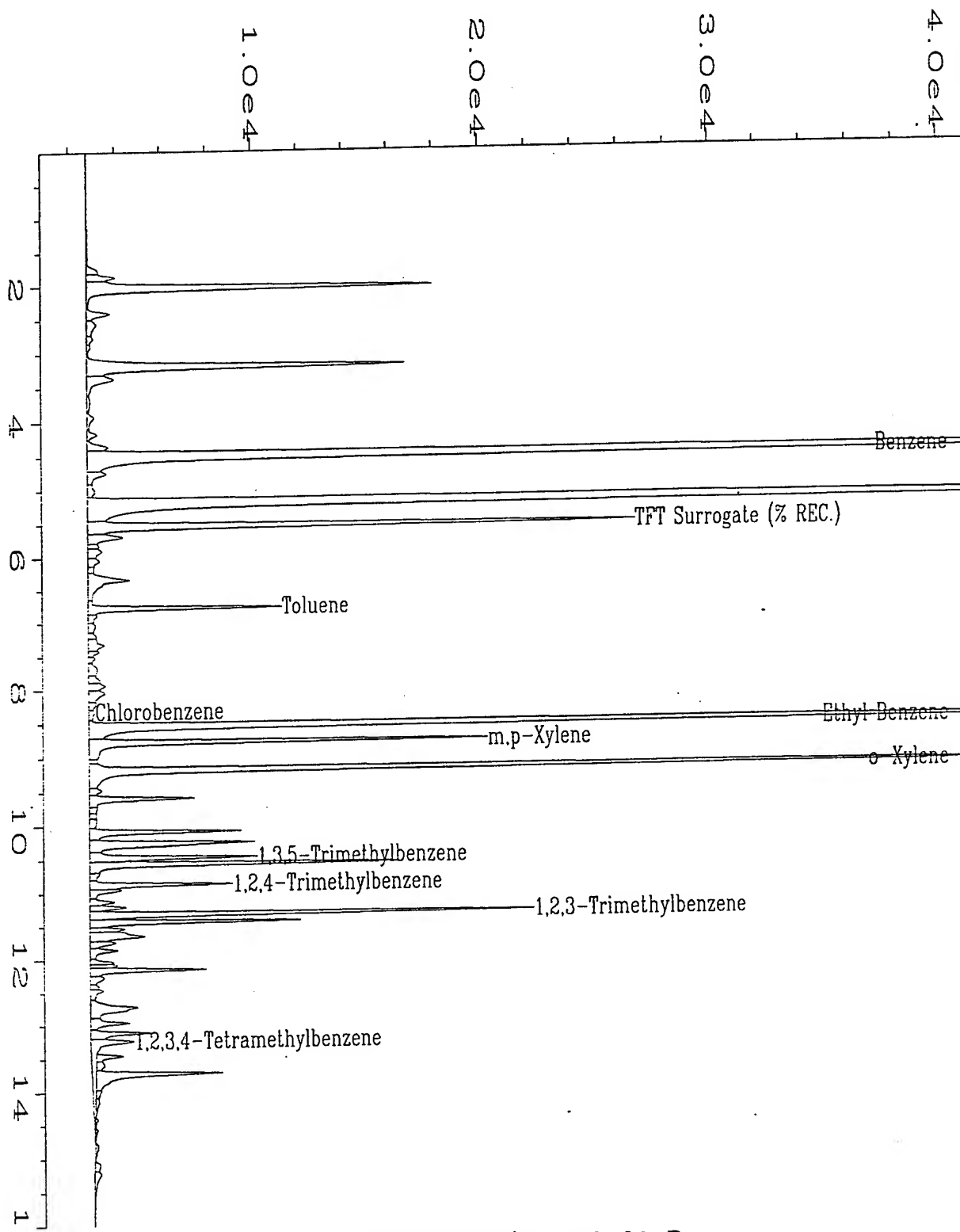
B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

AmCelle  
Approved



|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\014R0101.D | Page Number        | : 1          |
| Operator           | : KAPRIE S. CONE                      | Vial Number        | : 14         |
| Instrument         | : BTEX2                               | Injection Number   | : 1          |
| Sample Name        | : X05830;1;5                          | Sequence Line      | : 1          |
| Time Bar Code:     |                                       | Instrument Method: | BX20420.MT   |
| Acquired on        | : 20 Apr 95 09:17 PM                  | Analysis Method    | : BX20420.MT |
| Report Created on: | 20 Apr 95 09:34 PM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 20 APR 95 05:30 PM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |
| Sample Info        | : 95-1240; MW-7; 5 ML WATER           |                    |              |

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(303) 425-6021

Method 602 Data Report

|                      |           |                    |                     |
|----------------------|-----------|--------------------|---------------------|
| Client Sample Number | : MW-7    | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05830  | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95 | Dilution Factor    | : 5.00              |
| Date Received        | : 4/18/95 | Method             | : 602               |
| Date Prepared        | : 4/21/95 | Matrix             | : Water             |
| Date Analyzed        | : 4/21/95 | Lab File No.       | : BX2042111         |
|                      |           | Method Blank No.   | : MB042195          |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 180                          | 2.0                  |
| Toluene   | 108-88-3                          | **                           | 2.0                  |
| Chlorobenzene   | 108-90-7                          | **                           | 2.0                  |
| Ethyl Benzene   | 100-41-4                          | 120                          | 2.0                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 100                          | 2.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                           | 2.0                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                           | 2.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                           | 2.0                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           | 2.0                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 101%                         | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042014.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

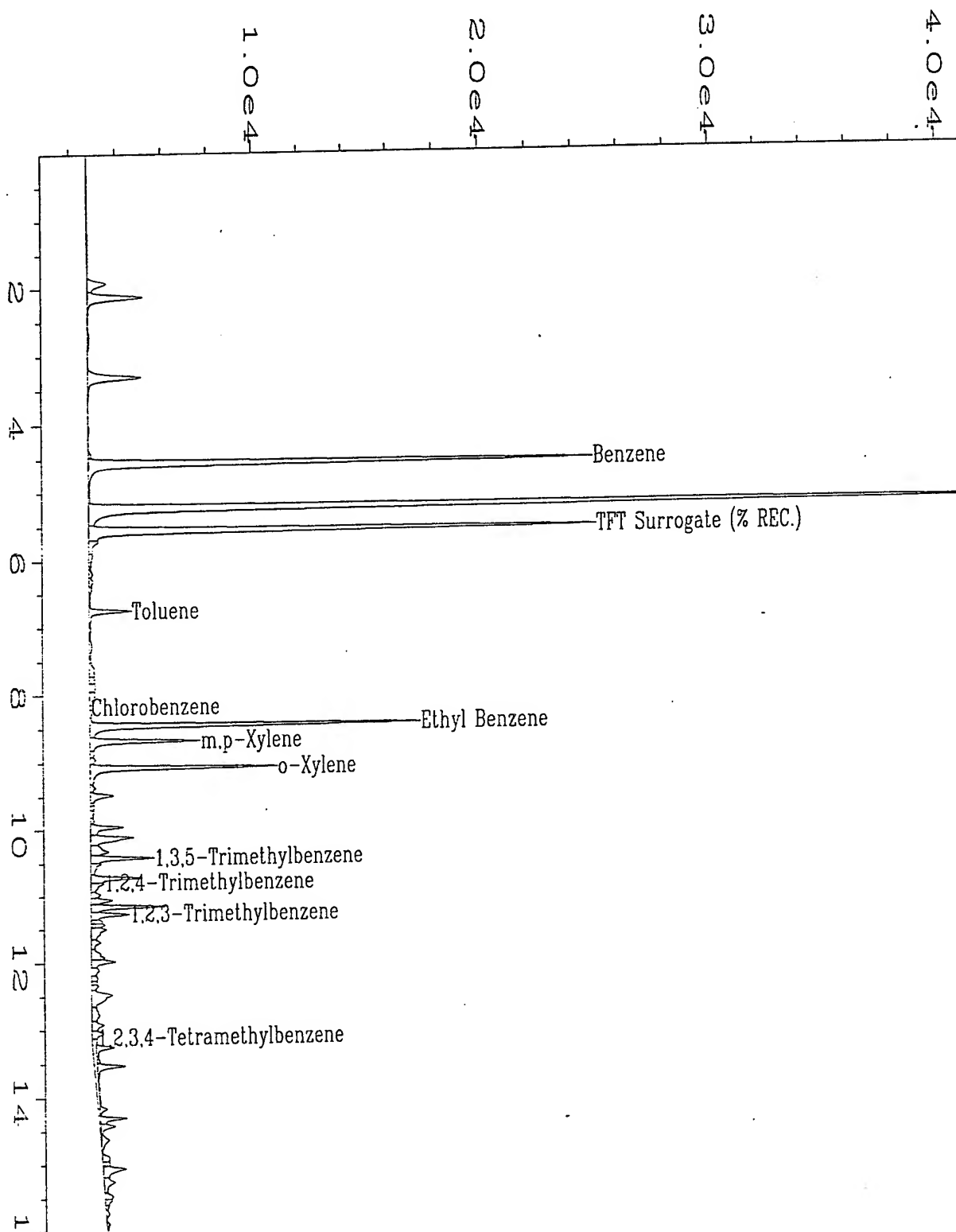
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*A. McCall*

Approved



|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\011R0101.D | Page Number       | : 1          |
| Operator           | : T.Lockwood                          | Vial Number       | : 11         |
| Instrument         | : BTEX2                               | Injection Number  | : 1          |
| Sample Name        | : X05830;5;1                          | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MT |
| Acquired on        | : 21 Apr 95 03:50 PM                  | Analysis Method   | : BX20421.MT |
| Report Created on  | : 22 Apr 95 12:52 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :            |
| Multiplier         | : 5                                   |                   |              |
| Sample Info        | : 95-1240; MW-7; 1.0 ML WATER         |                   |              |

EVERGREEN ANALYTICAL, INC.  
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Method 602 Data Report

|                      |           |                    |                     |
|----------------------|-----------|--------------------|---------------------|
| Client Sample Number | : MW-10   | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05831  | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95 | Dilution Factor    | : 1.00              |
| Date Received        | : 4/18/95 | Method             | : 602               |
| Date Prepared        | : 4/20/95 | Matrix             | : Water             |
| Date Analyzed        | : 4/20/95 | Lab File No.       | : BX2042015         |
|                      |           | Method Blank No.   | : MB042095          |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | 5.3                             | 0.4                  |
| Chlorobenzene   | 108-90-7                          | 0.7                             | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | 2.6                             | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 4.4                             | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 0.8                             | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 8.0                             | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 0.9                             | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 4.0                             | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 98%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

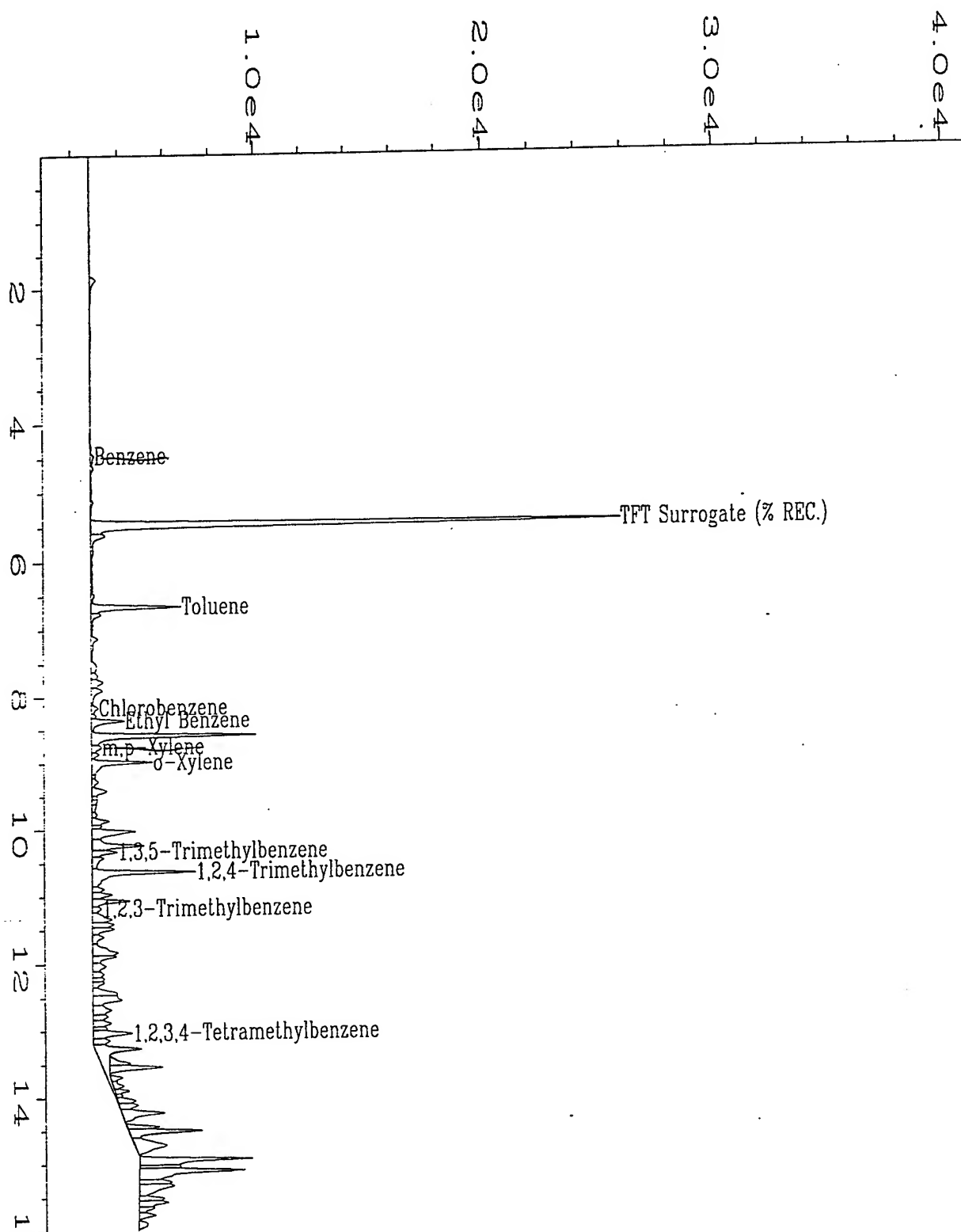
B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\015R0101.D | Page Number       | : 1          |
| Operator           | : KAPRIE S. CONE                      | Vial Number       | : 15         |
| Instrument         | : BTEX2                               | Injection Number  | : 1          |
| Sample Name        | : X05831;1;5                          | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20420.MT |
| quired on          | : 20 Apr 95 09:53 PM                  | Analysis Method   | : BX20420.MT |
| Report Created on: | : 20 Apr 95 10:10 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 20 APR 95 05:30 PM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |
| Sample Info        | : 95-1240; MW-10; 5 ML WATER          |                   |              |

5/10/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |           |                    |                     |
|----------------------|-----------|--------------------|---------------------|
| Client Sample Number | : MW-11   | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05832  | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95 | Dilution Factor    | : 10.00             |
| Date Received        | : 4/18/95 | Method             | : 602               |
| Date Prepared        | : 4/20/95 | Matrix             | : Water             |
| Date Analyzed        | : 4/20/95 | Lab File No.       | : BX2042016         |
|                      |           | Method Blank No.   | : MB042095          |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                           | 4.0                  |
| Toluene   | 108-88-3                          | **                           | 4.0                  |
| Chlorobenzene   | 108-90-7                          | 37                           | 4.0                  |
| Ethyl Benzene   | 100-41-4                          | **                           | 4.0                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | 4.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 180                          | 4.0                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                           | 4.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 140                          | 4.0                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 270                          | 4.0                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 107%                         | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042112 (DF=100).

QUALIFIERS:

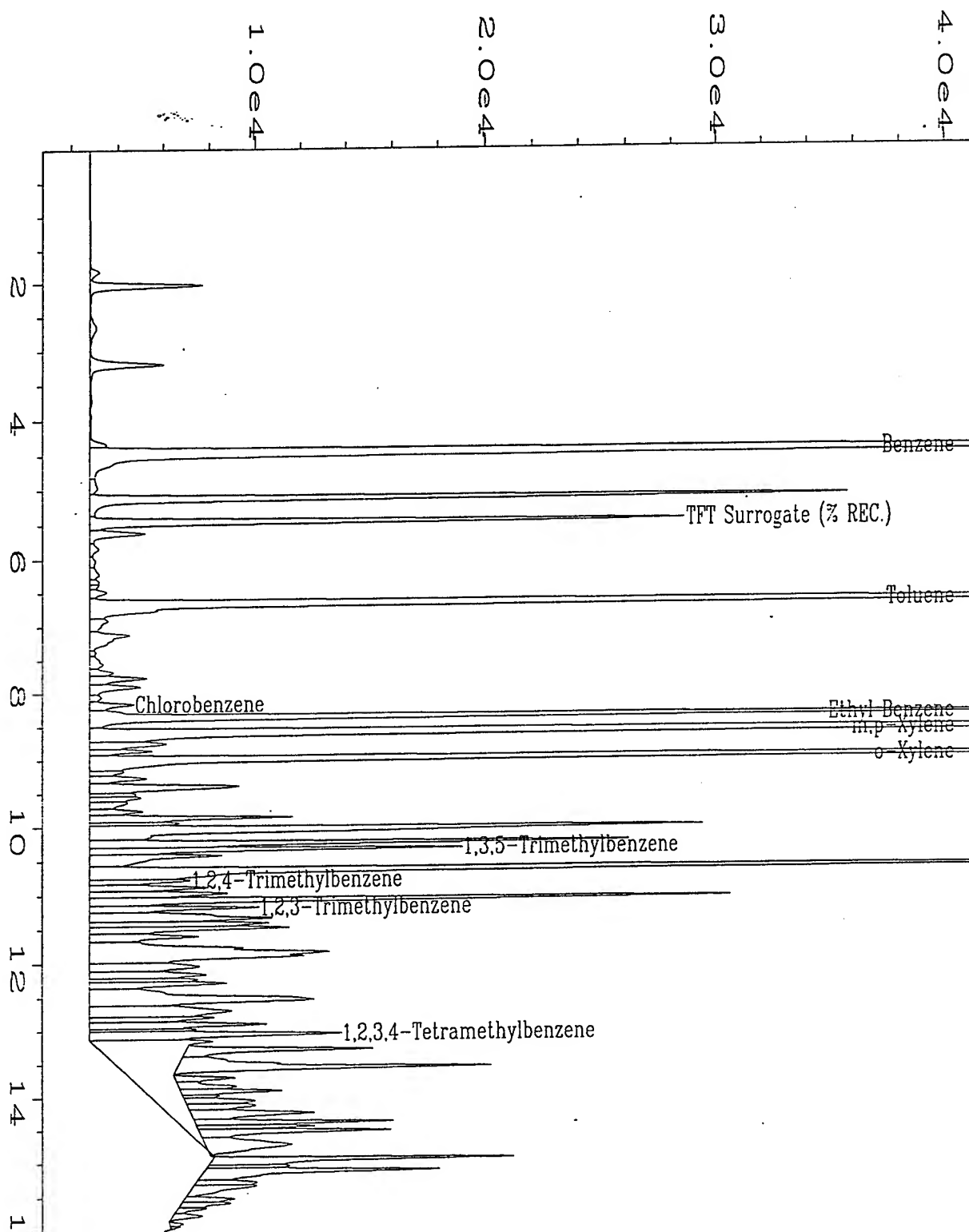
E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*AmChille*

Approved



|                    |                                       |                    |      |
|--------------------|---------------------------------------|--------------------|------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\016R0101.D | Page Number        | : 1  |
| Operator           | : KAPRIE S. CONE                      | Vial Number        | : 16 |
| Instrument         | : BTEX2                               | Injection Number   | : 1  |
| Sample Name        | : X05832;10;500UL                     | Sequence Line      | : 1  |
| Run Time Bar Code: |                                       | Instrument Method: | MT   |
| quired on          | : 20 Apr 95 10:30 PM                  | Analysis Method    | : MT |
| ort Created on:    | : 20 Apr 95 10:46 PM                  | Sample Amount      | : 0  |
| Last Recalib on    | : 20 APR 95 05:30 PM                  | ISTD Amount        | :    |
| Multiplier         | : 10                                  |                    |      |
| Sample Info        | : 95-1240; MW-10; 500 UL WATER        |                    |      |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

Method 602 Data Report

|                      |           |                    |                     |
|----------------------|-----------|--------------------|---------------------|
| Client Sample Number | : MW-11   | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05832  | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95 | Dilution Factor    | : 100.00            |
| Date Received        | : 4/18/95 | Method             | : 602               |
| Date Prepared        | : 4/21/95 | Matrix             | : Water             |
| Date Analyzed        | : 4/21/95 | Lab File No.       | : BX2042112         |
|                      |           | Method Blank No.   | : MB042195          |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 2300                         | 40.0                 |
| Toluene   | 108-88-3                          | 2000                         | 40.0                 |
| Chlorobenzene   | 108-90-7                          | **                           | 40.0                 |
| Ethyl Benzene   | 100-41-4                          | 620                          | 40.0                 |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 3700                         | 40.0                 |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                           | 40.0                 |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 610                          | 40.0                 |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                           | 40.0                 |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           | 40.0                 |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 99%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

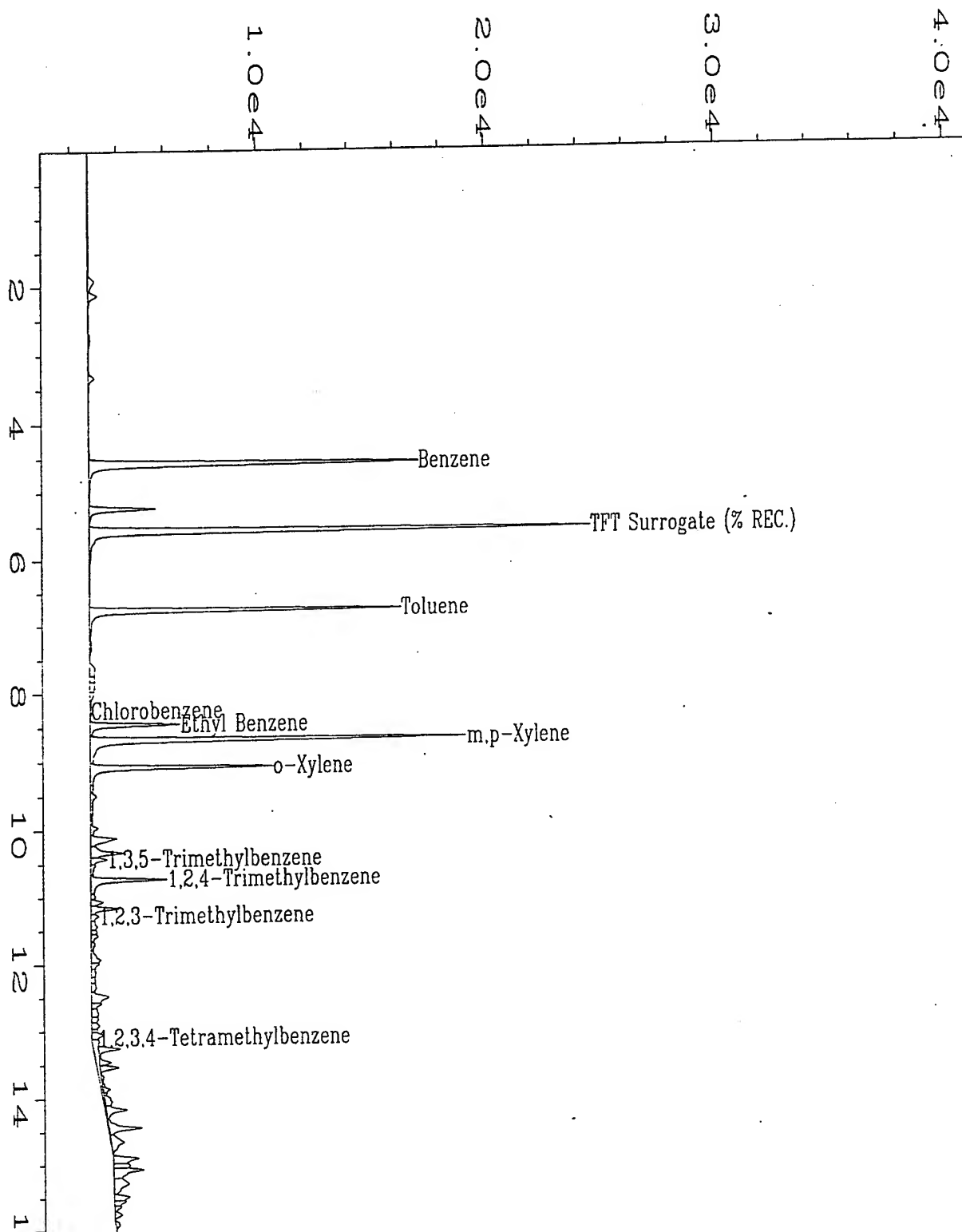
\*\* = See BX2042016 (DF = 10).

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

K. Cone  
Analyst

AmcCella  
Approved



|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\012R0101.D | Page Number       | : 1          |
| Operator           | : T.Lockwood                          | Vial Number       | : 12         |
| Instrument         | : BTEX2                               | Injection Number  | : 1          |
| Sample Name        | : X05832;100; <sup>02</sup> 0.050     | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MT |
| Acquired on        | : 21 Apr 95 04:29 PM                  | Analysis Method   | : BX20421.MT |
| Report Created on  | : 21 Apr 95 04:46 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :            |
| Multiplier         | : 100                                 |                   |              |
| Sample Info        | : 95-1240; MW-11; 0.050 ML WATER      |                   |              |

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Method 602 Data Report


|                      |              |                    |                     |
|----------------------|--------------|--------------------|---------------------|
| Client Sample Number | : Trip Blank | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05833     | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95    | Dilution Factor    | : 1.00              |
| Date Received        | : 4/18/95    | Method             | : 602               |
| Date Prepared        | : 4/23/95    | Matrix             | : Water             |
| Date Analyzed        | : 4/23/95    | Lab File No.       | : BX1042312         |
|                      |              | Method Blank No.   | : MB042395          |


| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 0.5                          | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 103%                         | 70%-130% (QC limits) |

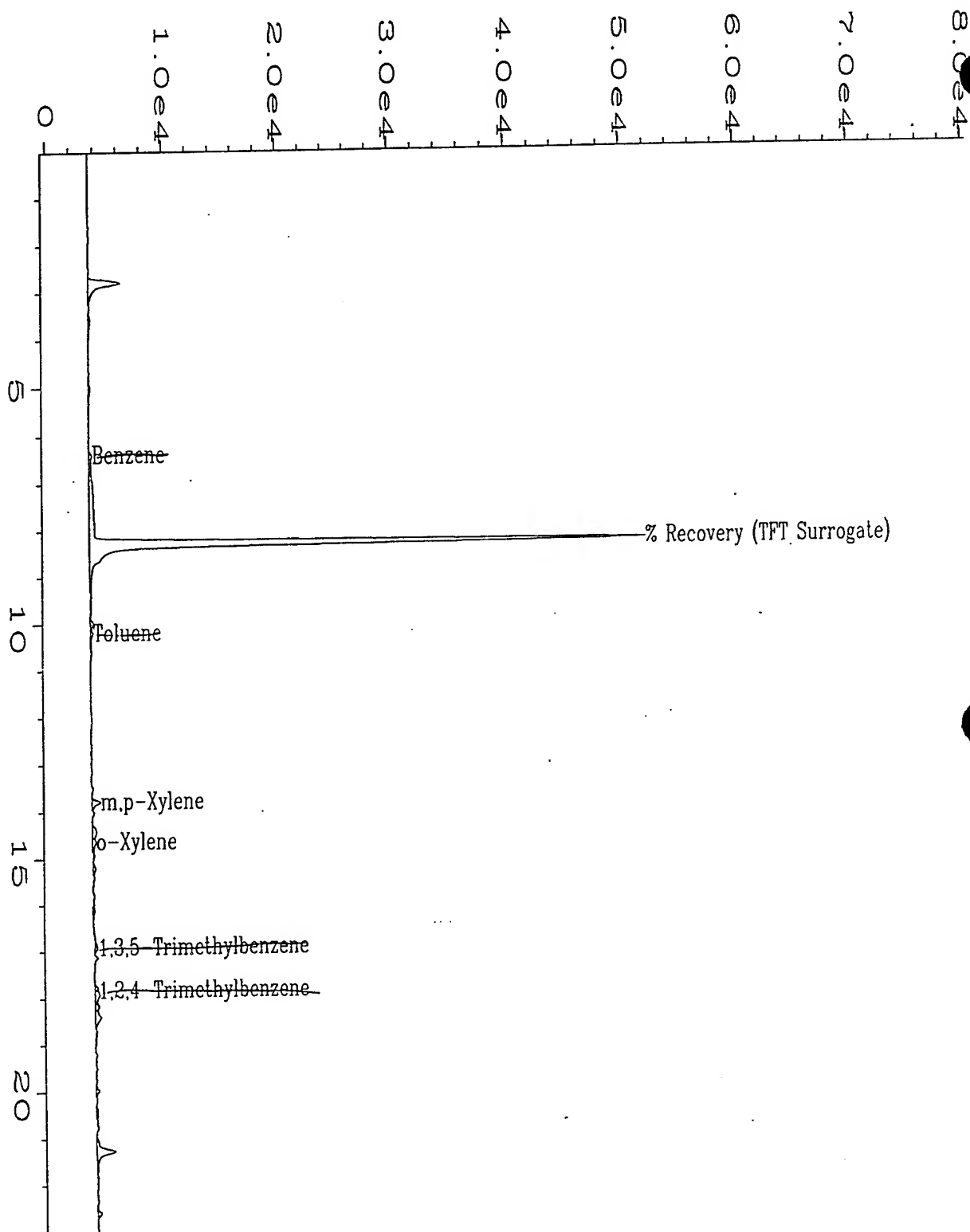
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



user modified

Data File Name : E:\1\DATA\BX10423\012F0901.D  
 Operator : SW Tyson  
 Instrument : BTEX1  
 Sample Name : X05833;1;5  
 Print Time Bar Code:  
 Acquired on : 23 Apr 95 04:03 PM  
 Report Created on: 25 Apr 95 01:11 PM  
 Last Recalib on : 24 APR 95 10:52 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 12  
 Injection Number : 1  
 Sequence Line : 9  
 Instrument Method: BX10423.M  
 Analysis Method : BX10423.M  
 Sample Amount : 0  
 ISTD Amount :

Am 5/10/95

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Method 602 Data Report

Client Sample Number : CPT-16  
Lab Sample Number : X05834  
Date Sampled : 4/17/95  
Date Received : 4/18/95  
Date Prepared : 4/20/95  
Date Analyzed : 4/20/95

Client Project No. : 722450.2602/SJAFB  
Lab Project No. : 95-1240  
Dilution Factor : 10.00  
Method : 602  
Matrix : Water  
Lab File No. : BX2042017  
Method Blank No. : MB042095

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                           | 4.0                  |
| Toluene   | 108-88-3                          | **                           | 4.0                  |
| Chlorobenzene   | 108-90-7                          | U                            | 4.0                  |
| Ethyl Benzene   | 100-41-4                          | **                           | 4.0                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | 4.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 110                          | 4.0                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 590                          | 4.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 260                          | 4.0                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 80                           | 4.0                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 103%                         | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

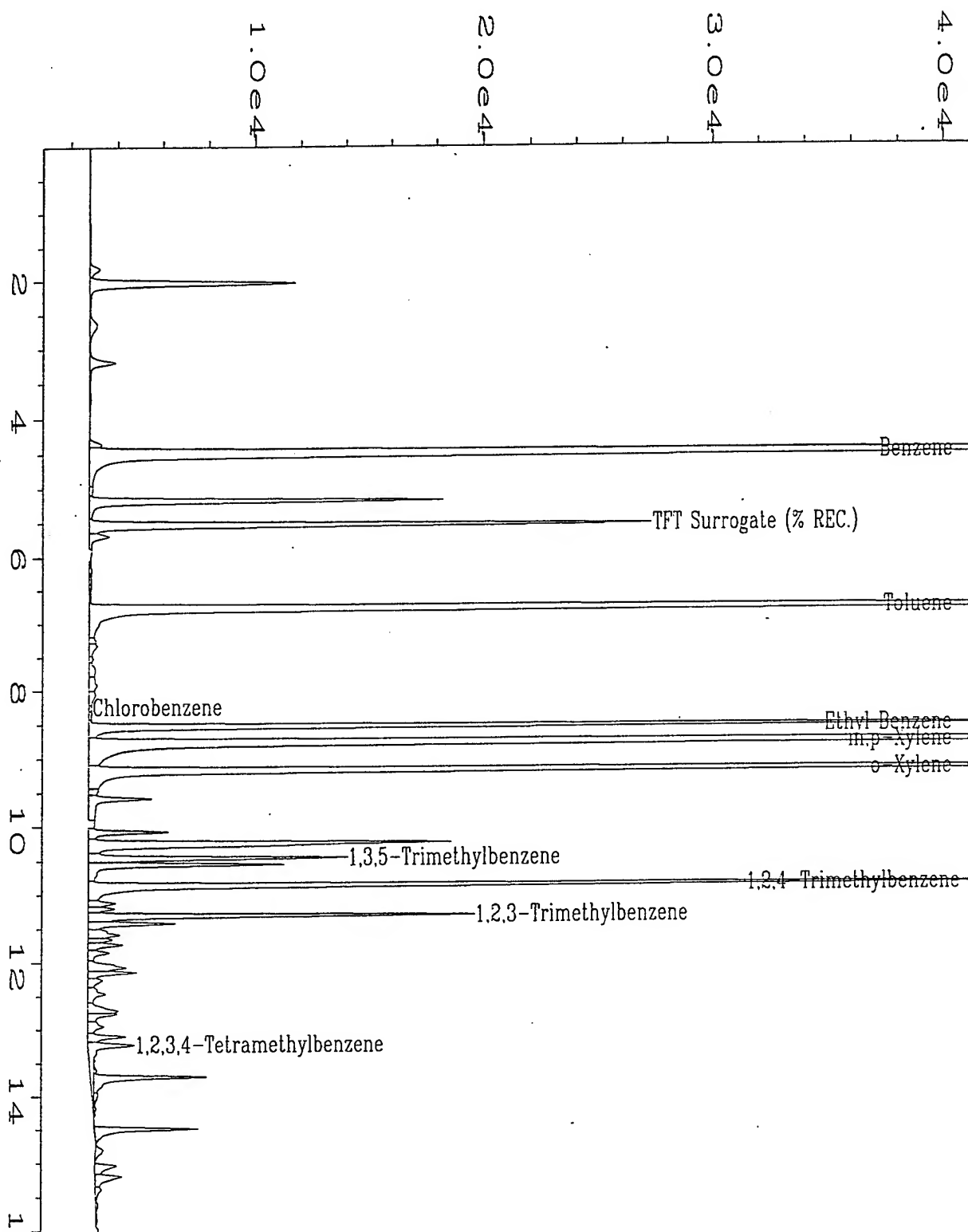
\*\* = See BX2042113 (DF=100).

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\017R0101.D | Page Number       | : 1         |
| Operator           | : KAPRIE S. CONE                      | Vial Number       | : 17        |
| Instrument         | : BTEX2                               | Injection Number  | : 1         |
| Sample Name        | : X05834;10;500UL                     | Sequence Line     | : 1         |
| Run Time Bar Code: |                                       | Instrument Method | : BX20420.M |
| Acquired on        | : 20 Apr 95 11:06 PM                  | Analysis Method   | : BX20420.M |
| Report Created on  | : 20 Apr 95 11:22 PM                  | Sample Amount     | : 0         |
| Last Recalib on    | : 20 APR 95 05:30 PM                  | ISTD Amount       | :           |
| Multiplier         | : 10                                  |                   |             |
| Sample Info        | : 95-1240; CPT-16; 500UL ML WATER     |                   |             |

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Method 602 Data Report

|                      |           |                    |                     |
|----------------------|-----------|--------------------|---------------------|
| Client Sample Number | : CPT-16  | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample Number    | : X05834  | Lab Project No.    | : 95-1240           |
| Date Sampled         | : 4/17/95 | Dilution Factor    | : 100.00            |
| Date Received        | : 4/18/95 | Method             | : 602               |
| Date Prepared        | : 4/21/95 | Matrix             | : Water             |
| Date Analyzed        | : 4/21/95 | Lab File No.       | : BX2042113         |
|                      |           | Method Blank No.   | : MB042195          |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | 2100                            | 40.0                 |
| Toluene   | 108-88-3                          | 2100                            | 40.0                 |
| Chlorobenzene   | 108-90-7                          | **                              | 40.0                 |
| Ethyl Benzene   | 100-41-4                          | 560                             | 40.0                 |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 4100                            | 40.0                 |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                              | 40.0                 |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                              | 40.0                 |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                              | 40.0                 |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                              | 40.0                 |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 99%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042017 (DF=10).

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

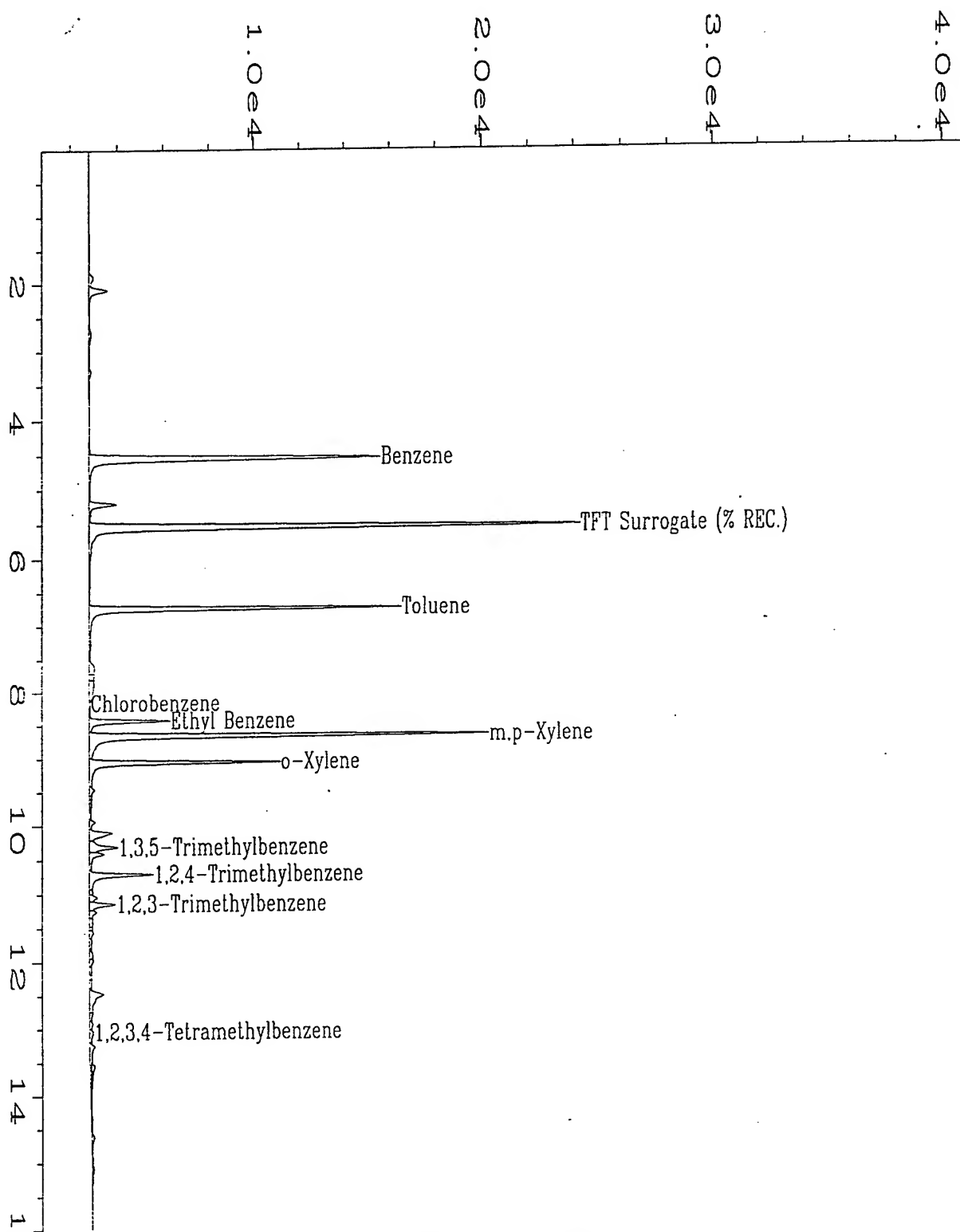
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*P. McClellan*

Approved



|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\013R0101.D | Page Number       | : 1         |
| Operator           | : T.Lockwood                          | Vial Number       | : 13        |
| Instrument         | : BTEX2                               | Injection Number  | : 1         |
| Sample Name        | : X05834;100;X0.050 <i>PK</i>         | Sequence Line     | : 1         |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.T |
| Acquired on        | : 21 Apr 95 05:06 PM                  | Analysis Method   | : BX20421.T |
| Report Created on  | : 21 Apr 95 05:22 PM                  | Sample Amount     | : 0         |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :           |
| Multiplier         | : 100                                 |                   |             |
| Sample Info        | : 95-1240; CPT-16; 0.050 ML WATER     |                   |             |

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(303) 425-6021

BTEX Matrix Spike/Matrix Spike Duplicate Data Report

|                   |           |                    |                     |
|-------------------|-----------|--------------------|---------------------|
| Client Sample No. | : MW-6    | Client Project No. | : 722450.2602/SJAFB |
| Lab Sample No.    | : X05829  | Lab Project No.    | : 95-1240           |
| Date Sampled      | : 4/17/95 | EPA Method No.     | : 602               |
| Date Received     | : 4/18/95 | Matrix             | : Water             |
| Date Prepared     | : 4/20/95 | Lab File Number(s) | : BX2042011,12      |
| Date Analyzed     | : 4/20/95 | Method Blank       | : MB042095          |

| Compound      | Spike Added (ug/L) | Sample Concentration (ug/L) | MS Concentration (ug/L) | MS %REC | QC Limits %REC |
|---------------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Benzene       | 20.0               | 25.0                        | 43.5                    | 92.5    | 50-150         |
| Toluene       | 20.0               | 1.0                         | 20.7                    | 98.5    | 50-148         |
| Ethyl Benzene | 20.0               | 0.0                         | 19.6                    | 98.0    | 50-150         |
| m,p-Xylene    | 40.0               | 0.0                         | 39.7                    | 99.3    | 50-150         |
| o-Xylene      | 20.0               | 0.0                         | 20.0                    | 100.0   | 50-150         |
| Chlorobenzene | 20.0               | 0.0                         | 19.5                    | 97.5    | 55-135         |
| 1,3,5-TMB     | 20.0               | 0.0                         | 19.9                    | 99.5    | 50-150         |
| 1,2,4-TMB     | 20.0               | 0.0                         | 19.6                    | 98.0    | 50-150         |
| 1,2,3-TMB     | 20.0               | 0.0                         | 19.1                    | 95.5    | 50-150         |
| 1,2,3,4-TeMB  | 20.0               | 0.0                         | 21.1                    | 105.5   | 50-150         |

| Compound      | Spike Added (ug/L) | MSD Concentration (ug/L) | MSD %REC | RPD    | QC Limits |        |
|---------------|--------------------|--------------------------|----------|--------|-----------|--------|
|               |                    |                          |          |        | RPD       | %REC   |
| Benzene       | 20.0               | 42.5                     | 87.5     | 5.6    | 25        | 50-150 |
| Toluene       | 20.0               | 19.8                     | 94.0     | 4.7    | 25        | 50-148 |
| Ethyl Benzene | 20.0               | 18.7                     | 93.5     | 4.7    | 25        | 50-150 |
| m,p-Xylene    | 40.0               | 37.8                     | 94.5     | 4.9    | 25        | 50-150 |
| o-Xylene      | 20.0               | 18.6                     | 93.0     | 7.3    | 25        | 50-150 |
| Chlorobenzene | 20.0               | 18.6                     | 93.0     | 4.7    | 25        | 55-135 |
| 1,3,5-TMB     | 20.0               | 18.3                     | 91.5     | 8.4    | 25        | 50-150 |
| 1,2,4-TMB     | 20.0               | 18.2                     | 91.0     | 7.4    | 25        | 50-150 |
| 1,2,3-TMB     | 20.0               | 17.9                     | 89.5     | 6.5    | 25        | 50-150 |
| 1,2,3,4-TeMB  | 20.0               | 16.1                     | 80.5     | 26.9 * | 25        | 50-150 |

\* = Values outside of QC limits.

RPD: 1 out of (10) outside limits.

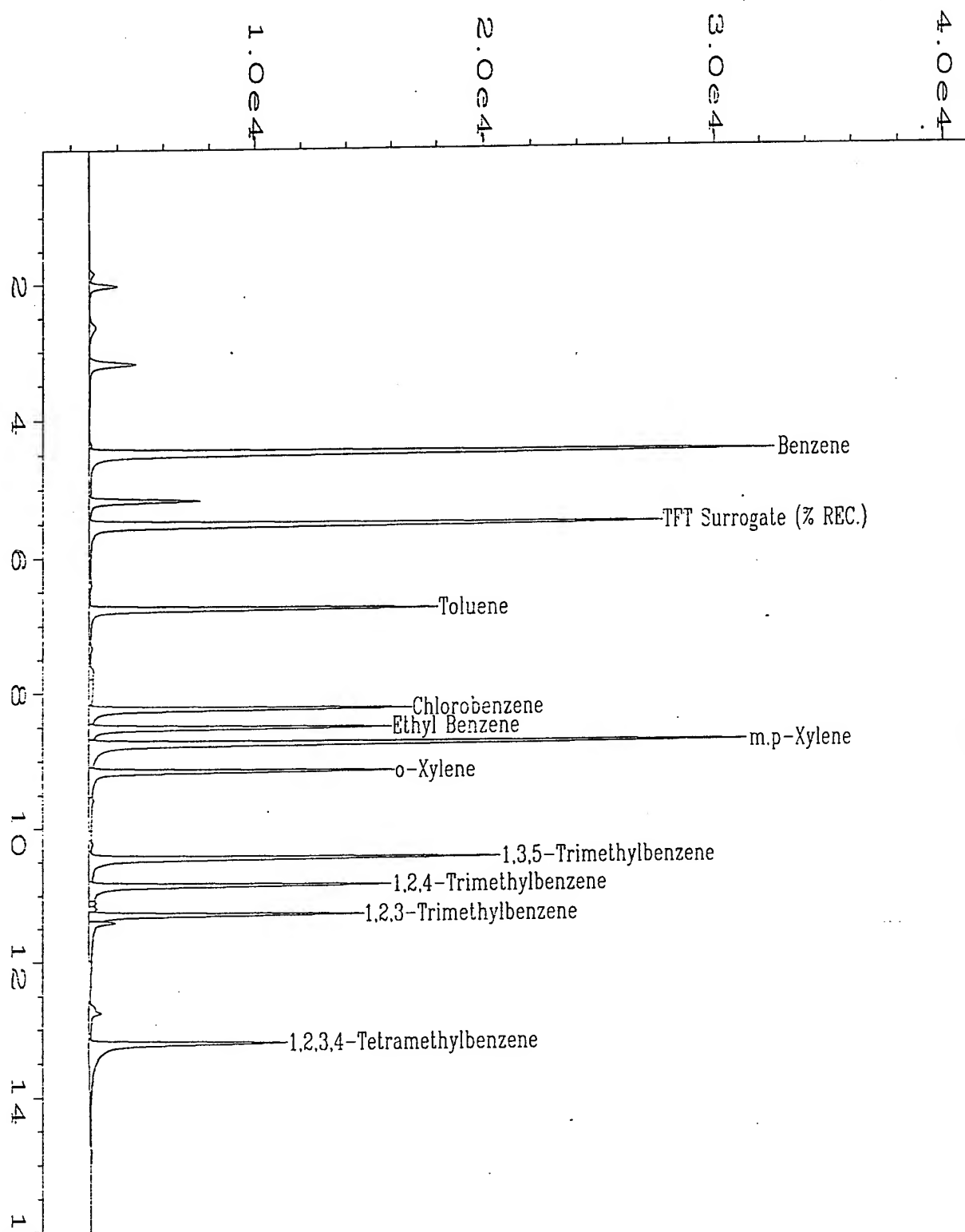
Spike Recovery: 0 out of (20) outside limits.

Comments: See LCS042095.

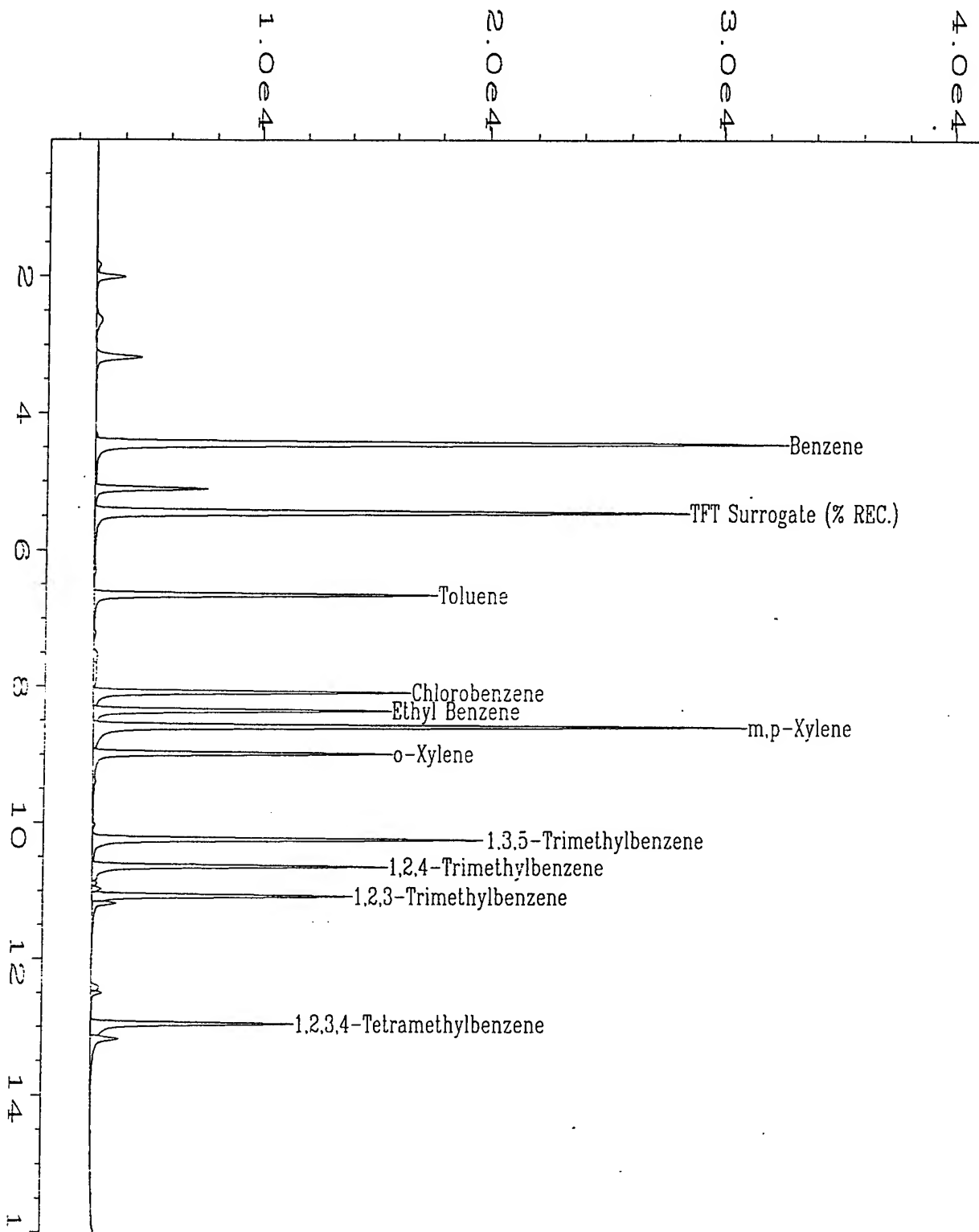
K. Cone  
Analyst

Amelle  
Approved

MS1240.XLS



|                    |   |                    |      |
|--------------------|---|--------------------|------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\011R0101.D     | Page Number        | : 1  |
| Operator           | : KAPRIE S. CONE                          | Vial Number        | : 11 |
| Instrument         | : BTEX2                                   | Injection Number   | : 1  |
| Sample Name        | : X05829MS;1;5                            | Sequence Line      | : 1  |
| Run Time Bar Code: |   | Instrument Method: | MT   |
| quired on          | : 20 Apr 95 07:30 PM                      | Analysis Method    | : MT |
| ort Created on:    | 20 Apr 95 07:47 PM                        | Sample Amount      | : 0  |
| Last Recalib on    | : 20 APR 95 05:30 PM                      | ISTD Amount        | :    |
| Multiplier         | : 1                                       |                    |      |
| Sample Info        | : 95-1240; MW-6; 5 ML WATER; 20 PPB SPIKE |                    |      |



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20420\012R0101.D | Page Number       | : 1           |
| Operator           | : KAPRIE S. CONE                      | Vial Number       | : 12          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05829MSD;1;5                       | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20420.MTH |
| Acquired on        | : 20 Apr 95 08:06 PM                  | Analysis Method   | : BX20420.MTH |
| Report Created on: | 21 Apr 95 09:00 AM                    | Sample Amount     | : 0           |
| Last Recalib on    | : 20 Apr 95 05:30 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |              |
|-------------------------|-------------|-----------------|--------------|
| LCS Number              | : LCS042095 | Dilution Factor | : 1.00       |
| Date Extracted/Prepared | : 4/20/95   | Method          | : 602        |
| Date Analyzed           | : 4/20/95   | Matrix          | : Water      |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX10420008 |

| Compound Name   | Cas<br>Number | LCS<br>Concentration<br>ug/L | LCS<br>%<br>Recovery | QC Limit<br>% Recovery |
|---|---------------|------------------------------|----------------------|------------------------|
| Benzene   | 71-43-2       | 17.8                         | 89.0                 | 71.0-119.0*            |
| Toluene   | 108-88-3      | 18.6                         | 93.0                 | 73.0-111.0*            |
| Chlorobenzene   | 108-90-7      | 18.5                         | 92.5                 | 64.0-119.0*            |
| Ethyl Benzene   | 100-41-4      | 18.7                         | 93.5                 | 75.0-114.0*            |
| m,p-Xylene  | 108-38-3      | 19.5                         | 97.5                 | 75.0-114.0*            |
| o-Xylene  | 106-42-3      |                              |                      |                        |
|   | 95-47-6       | 18.3                         | 91.5                 | 64.0-119.0*            |
| 1,3,5-Trimethylbenzene  | 108-67-8      | 19.4                         | 97.0                 | 50.0-150.0             |
| 1,2,4-Trimethylbenzene  | 95-63-6       | 17.9                         | 89.5                 | 50.0-150.0             |
| 1,2,3-Trimethylbenzene  | 526-73-8      | 17.9                         | 89.5                 | 50.0-150.0             |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3      | 19.6                         | 98.0                 | 50.0-150.0             |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |               | 110%                         | 70%-130% (QC limits) |                        |

\* = Limits established 4/3/95 KSC

QUALIFIERS:


E = Extrapolated value


U = Compound analyzed for, but not detected.

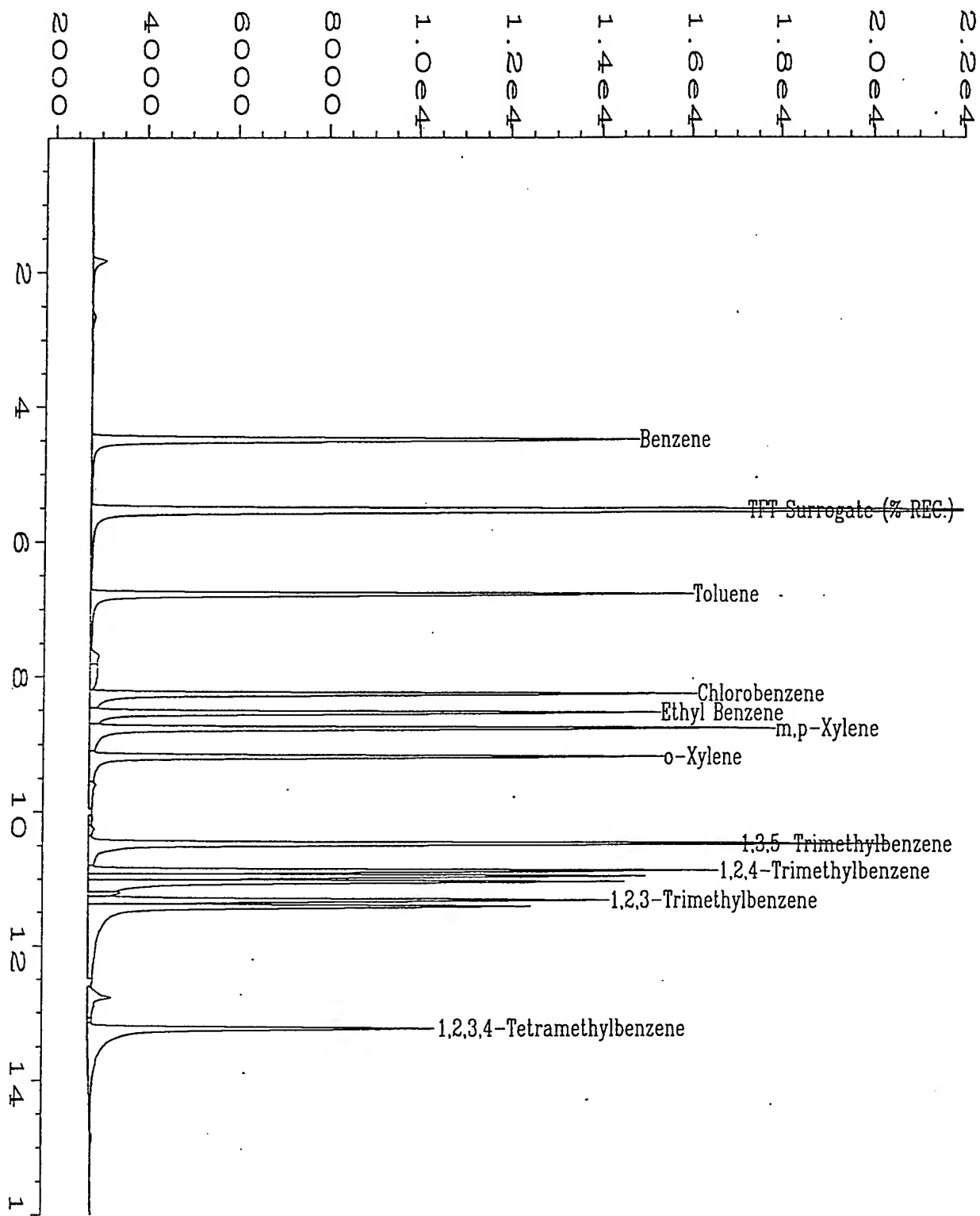
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

'A = Not available/Not analyzed.

  
Analyst

  
Approved



|                          |                                       |                   |               |
|--------------------------|---------------------------------------|-------------------|---------------|
| Data File Name           | : C:\HPCHEM\2\DATA\BX20420\008R0101.D | Page Number       | : 1           |
| Operator                 | : KAPRIE S. CONE                      | Vial Number       | : 8           |
| Instrument               | : BTEX2                               | Injection Number  | : 1           |
| Sample Name              | : LCS042095                           | Sequence Line     | : 1           |
| Retention Time Bar Code: |                                       | Instrument Method | : BX20420.MTH |
| Acquired on              | : 20 Apr 95 05:42 PM                  | Analysis Method   | : BX20420.MTH |
| Report Created on:       | 20 Apr 95 05:58 PM                    | Sample Amount     | : 0           |
| Last Recalib on          | : 20 APR 95 05:30 PM                  | ISTD Amount       | :             |
| Multiplier               | : 1                                   |                   |               |
| Sample Info              | : REF # 1649                          |                   |               |

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BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |              |
|-------------------------|-------------|-----------------|--------------|
| LCS Number              | : LCS042195 | Dilution Factor | : 1.00       |
| Date Extracted/Prepared | : 4/21/95   | Method          | : 602        |
| Date Analyzed           | : 4/21/95   | Matrix          | : Water      |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX20421009 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 17.9                   | 89.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 18.3                   | 91.5                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 18.8                   | 94.0                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 18.7                   | 93.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 19.6                   | 98.0                 | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 18.8                   | 94.0                 | 64.0-111.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 18.7                   | 93.5                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 18.5                   | 92.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 100%                   | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

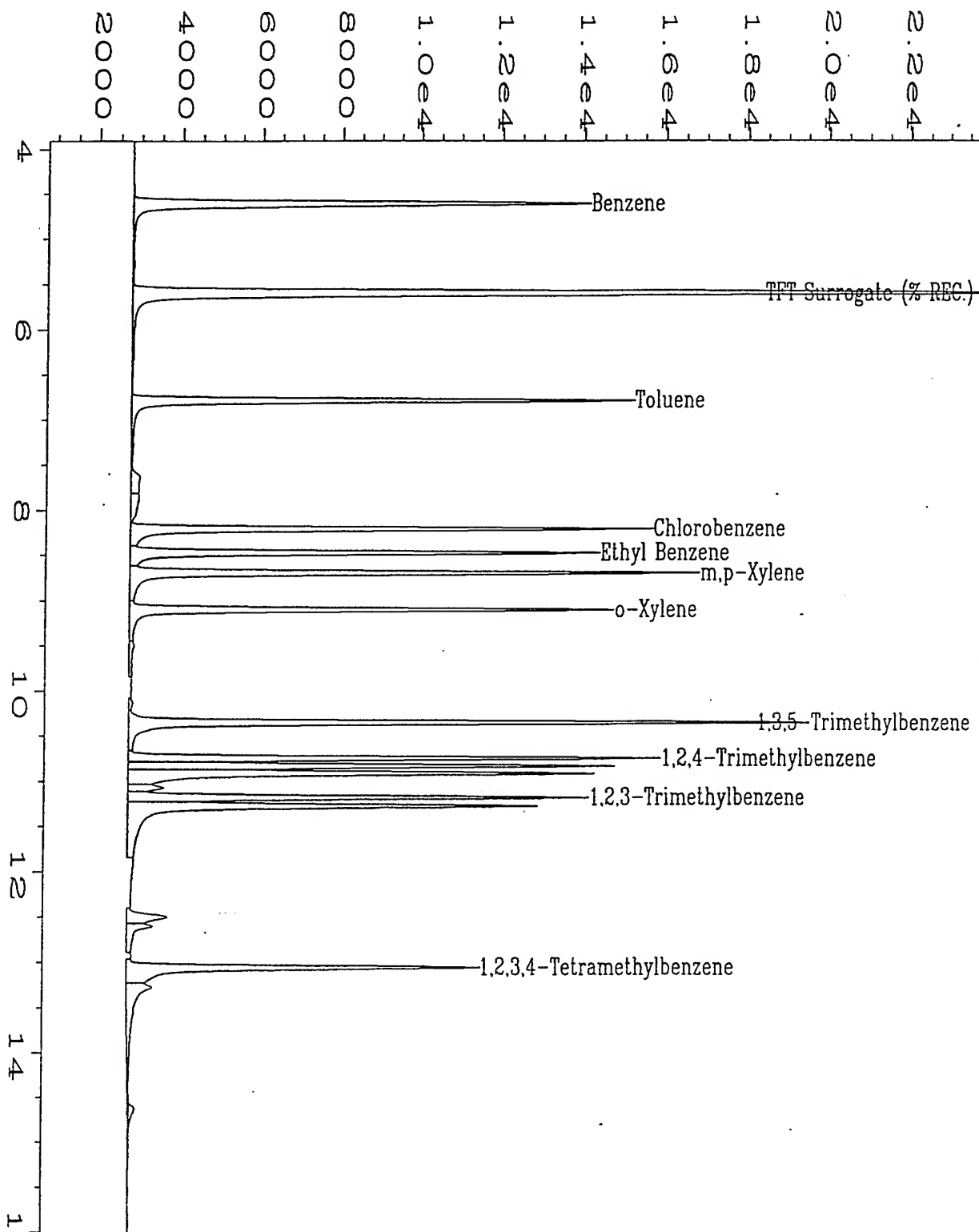
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

Analyst

Approved



|                   |                                       |                   |               |
|-------------------|---------------------------------------|-------------------|---------------|
| Data File Name    | : C:\HPCHEM\2\DATA\BX20421\009R0101.D | Page Number       | : 1           |
| Operator          | : T.Lockwood                          | Vial Number       | : 9           |
| Instrument        | : BTEX2                               | Injection Number  | : 1           |
| Sample Name       | : LCS042195                           | Sequence Line     | : 1           |
| Time Bar Code:    |                                       | Instrument Method | : BX20421.MTH |
| Printed on        | : 21 Apr 95 02:25 PM                  | Analysis Method   | : BX20421.MTH |
| Report Created on | : 21 Apr 95 02:54 PM                  | Sample Amount     | : 0           |
| Last Recalib on   | : 21 APR 95 02:28 PM                  | ISTD Amount       | :             |
| Multiplier        | : 1                                   |                   |               |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |                |                 |             |
|-------------------------|----------------|-----------------|-------------|
| LCS Number              | : LCS042395New | Dilution Factor | : 1.00      |
| Date Extracted/Prepared | : 4/23/95      | Method          | : 602       |
| Date Analyzed           | : 4/23/95      | Matrix          | : Water     |
| Spike Amount (ug/L)     | : 20.0         | Lab File No.    | : BX1042311 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 19.1                   | 95.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 19.9                   | 99.5                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 19.7                   | 98.5                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 20.0                   | 100.0                | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 20.9                   | 104.5                | 75.0-114.0*         |
| o-Xylene  | 106-42-3   | 19.3                   | 96.5                 | 64.0-119.0*         |
|   | 95-47-6    |                        |                      |                     |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 21.6                   | 108.0                | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 21.8                   | 109.0                | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 23.3                   | 116.5                | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 20.2                   | 101.0                | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 92%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

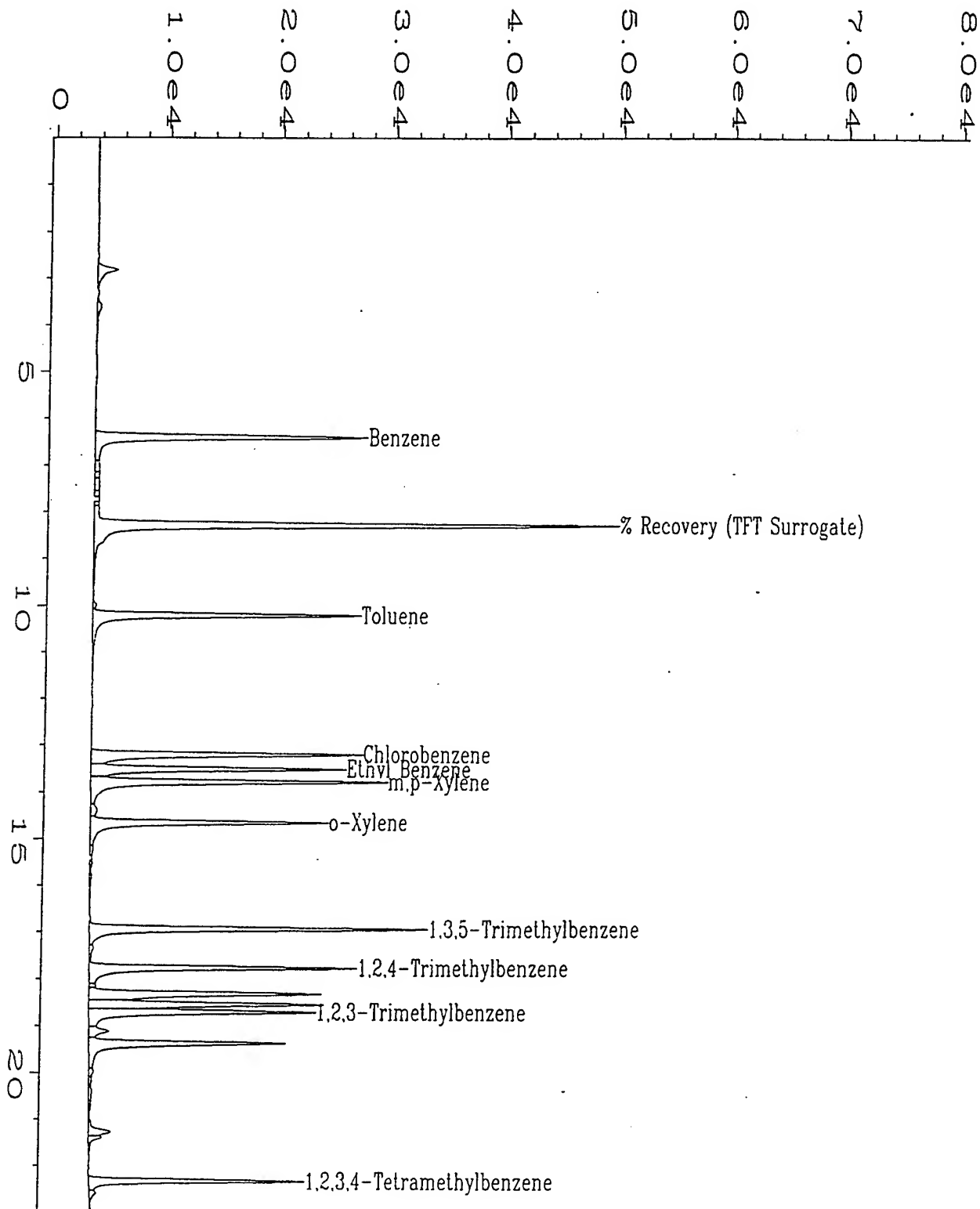
NA = Not available/Not analyzed.



Analyst



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Data File Name : E:\1\DATA\BX10423\011F0901.D  
 Operator : SW Tyson  
 Instrument : BTEX1  
 Sample Name : New LCS 1667  
 Time Bar Code:  
 Acquired on : 23 Apr 95 03:22 PM  
 Report Created on: 25 Apr 95 01:08 PM  
 Last Recalib on : 24 APR 95 10:52 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 11  
 Injection Number : 1  
 Sequence Line : 9  
 Instrument Method: BX10423.MTH  
 Analysis Method : BX10423.MTH  
 Sample Amount : 0  
 ISTD Amount :

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |             |
|-------------------------|-------------|-----------------|-------------|
| LCS Number              | : LCS042395 | Dilution Factor | : 1.00      |
| Date Extracted/Prepared | : 4/23/95   | Method          | : 602       |
| Date Analyzed           | : 4/23/95   | Matrix          | : Water     |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX1042309 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 17.4                   | 87.0                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 18.0                   | 90.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 16.5                   | 82.5                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 18.3                   | 91.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 18.9                   | 94.5                 | 75.0-114.0*         |
| o-Xylene  | 106-42-3   | 17.0                   | 85.0                 | 64.0-111.0*         |
|   | 95-47-6    |                        |                      |                     |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 18.2                   | 91.0                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 18.2                   | 91.0                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 19.1                   | 95.5                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 13.1                   | 65.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 96%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:


E = Extrapolated value

U = Compound analyzed for, but not detected.

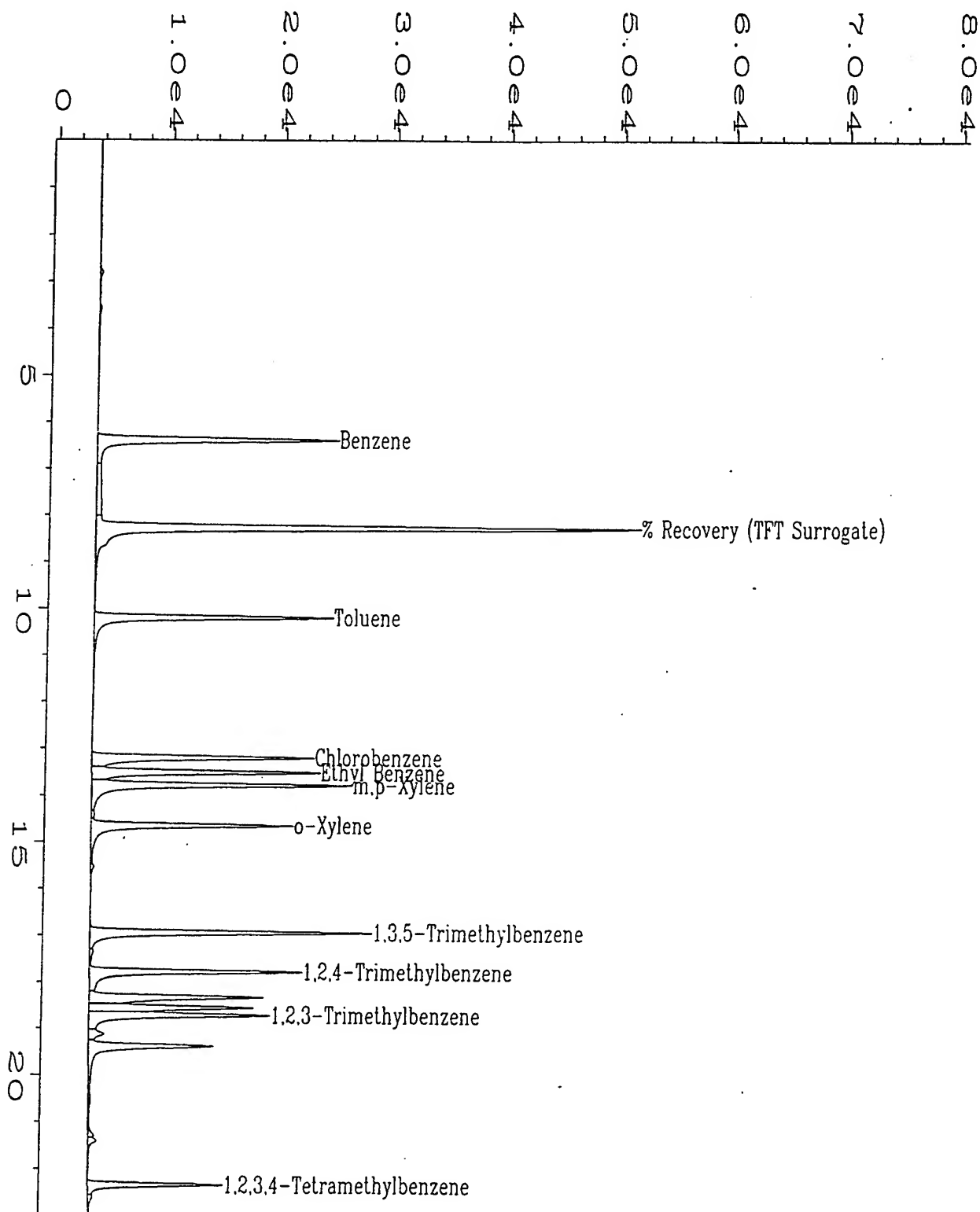
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

  
Analyst

  
Approved



Data File Name : E:\1\DATA\BX10423\009F0901.D  
 Operator : SW Tyson  
 Instrument : BTEX1  
 Sample Name : LCS042395  
 Time Bar Code:  
 Acquired on : 23 Apr 95 02:01 PM  
 Report Created on: 25 Apr 95 01:02 PM  
 Last Recalib on : 24 APR 95 10:52 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 9  
 Injection Number : 1  
 Sequence Line : 9  
 Instrument Method: BX10423.MTH  
 Analysis Method : BX10423.MTH  
 Sample Amount : 0  
 ISTD Amount :

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4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |             |
|-------------------------|------------|--------------------|-------------|
| Client Sample Number    | : MW-11    | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05832   |                    | : SJAFB     |
| Date Sampled            | : 04/17/95 | Lab Project No.    | : 95-1240   |
| Date Received           | : 04/18/95 | Effective Dilution | : 1.00      |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624       |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER     |
|                         |            | Lab File No.       | : >L0487    |
|                         |            | Method Blank No.   | : RB050195  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 1,700 E       | 0.5                         |
| Toluene                             | 108-88-3   | 1,400 E       | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | 650 E         | 0.5                         |
| Total Xylenes                       | 1330-20-7  | 3,100 E       | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 160           | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 430 E         | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 200           | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 17            | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 32            | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | 31            | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 98% |
| Toluene-d8            | 94% |
| Bromofluorobenzene    | 95% |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limit.  
NA = Not applicable or not available.

Analyst

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4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA  
Target Compound List

|                         |            |                    |                 |
|-------------------------|------------|--------------------|-----------------|
| Client Sample Number    | : MW-11    | Client I.D.        | : 722450.2602 / |
| Lab Sample Number       | : X05832   |                    | SJAFB           |
| Date Sampled            | : 04/17/95 | Lab Project No.    | : 95-1240       |
| Date Received           | : 04/18/95 | Effective Dilution | : 1.00          |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624           |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER         |
|                         |            | Lab File No.       | : >L0487        |
|                         |            | Method Blank No.   | : RB050195      |

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 3 B           | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | 290           | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | 440 E         | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | 120           | 1.0                         |
| Chloroform                | 67-66-3    | U             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | 20            | 1.0                         |
| 2-Butanone                | 78-93-3    | 20            | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | 250           | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | 770 E         | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | 1,700 E       | 0.5                         |
| Dibromochloromethane      | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | 1,400 E       | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | 650 E         | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | 3,100 E       | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |     |           |          |
|-----------------------|-----|-----------|----------|
| 1,2 Dichloroethane-d4 | 98% | QC Limits | {83-112} |
| Toluene-d8            | 94% |           | {93-104} |
| Bromofluorobenzene    | 95% |           | {87-105} |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wat.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |             |
|-------------------------|------------|--------------------|-------------|
| Client Sample Number    | : MW-11    | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05832   |                    | : SJAFB     |
| Date Sampled            | : 04/17/95 | Lab Project No.    | : 95-1240   |
| Date Received           | : 04/18/95 | Effective Dilution | : 5.00      |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624       |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER     |
|                         |            | Lab File No.       | : >L0502    |
|                         |            | Method Blank No.   | : RB050295  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 2,200         | 2.5                         |
| Toluene                             | 108-88-3   | 1,900         | 2.5                         |
| Ethyl Benzene                       | 100-41-4   | 680           | 2.5                         |
| Total Xylenes                       | 1330-20-7  | 3,900         | 2.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 130           | 2.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 440           | 2.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 190           | 2.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 19            | 5.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | U             | 5.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 5.0                         |
| Styrene                             | 100-42-5   | U             | 5.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 5.0                         |
| Isopropyl ether         | 108-20-3   | 28            | 5.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 5.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 5.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 5.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 5.0                         |

Surrogate Recoveries:

|                       |     | QC Limits |
|-----------------------|-----|-----------|
| 1,2 Dichloroethane-d4 | 94% | (83-112)  |
| Toluene-d8            | 97% | (93-104)  |
| Bromofluorobenzene    | 94% | (87-105)  |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

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4036 Youngfield Wheat Ridge CO 80033  
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VOLATILE ORGANICS ANALYSIS DATA

Client Sample Number : MW-11  
Lab Sample Number : X05832  
Date Sampled : 04/17/95  
Date Received : 04/18/95  
Date Extracted/Prepared : 05/02/95  
Date Analyzed : 05/02/95

Target Compound List  
Client I.D. : 722450.2602 /  
SJAFB  
Lab Project No. : 95-1240  
Effective Dilution : 5.00  
Method : 624  
Matrix : WATER  
Lab File No. : >L0502  
Method Blank No. : RB050295

| Compound Name          | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|------------------------|------------|---------------|-----------------------------|
| 1,1-Dichloroethene     | 75-35-4    | 300           | 5.0                         |
| 1,1-Dichloroethane     | 75-34-3    | 440           | 5.0                         |
| Cis-1,2-Dichloroethene | 156-59-2   | 120           | 5.0                         |
| 1,1,1-Trichloroethane  | 71-55-6    | 200           | 2.5                         |
| Trichloroethene        | 79-01-6    | 850           | 5.0                         |
| Benzene                | 71-43-2    | 2,200         | 2.5                         |
| Toluene                | 108-88-3   | 1,900         | 2.5                         |
| Ethyl Benzene          | 100-41-4   | 680           | 2.5                         |
| Total Xylenes          | 1330-20-7  | 3,900         | 2.5                         |

Surrogate Recoveries:

1,2 Dichloroethane-d4 94%  
Toluene-d8 97%  
Bromofluorobenzene 94%

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

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4036 Youngfield Wheat Ridge CO 80033  
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VOLATILE ORGANICS ANALYSIS DATA  
METHOD BLANK REPORT

GC Confirmation and Additional Compounds  
Method Blank Number : RB050195 Client I.D. : 722450.2  
Date Extracted/Prepared : 05/01/95 SJAFB  
Date Analyzed : 05/01/95 Lab Project No. : 95-1240  
Effective Dilution : 1.00  
Method : 624  
Lab File No. : >L0486

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | U             | 0.5                         |
| Toluene                             | 108-88-3   | UU            | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | U             | 0.5                         |
| Total Xylenes                       | 1330-20-7  | U             | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | U             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | UU            | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | U             | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | U             | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | U             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | UU            | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | UU            | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | UU            | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | UU            | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

1,2 Dichloroethane-d4 104%  
Toluene-d8 102%  
Bromofluorobenzene 98%

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent w  
E = Compound is detected but concentration is outside of calibration limit  
NA = Not applicable or not available.

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VOLATILE ORGANICS ANALYSIS DATA  
METHOD BLANK REPORT  
Target Compound List

Method Blank Number : RB050195 Client I.D. : 722450.2602 /  
Date Extracted/Prepared : 05/01/95 SJAFB  
Date Analyzed : 05/01/95 Lab Project No. : 95-1240  
Effective Dilution : 1.00  
Method : 624  
Lab File No. : >L0486

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 3             | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | U             | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | U             | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | U             | 1.0                         |
| Chloroform                | 67-66-3    | 2             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | U             | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | U             | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | U             | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | U             | 0.5                         |
| Dibromochloromethane      | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | U             | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | U             | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | U             | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

QC Limits

|                       |      |          |
|-----------------------|------|----------|
| 1,2 Dichloroethane-d4 | 104% | (83-112) |
| Toluene-d8            | 102% | (93-104) |
| Bromofluorobenzene    | 98%  | (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

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VOLATILE ORGANICS ANALYSIS DATA  
METHOD BLANK REPORT

GC Confirmation and Additional Compounds

|                         |            |                    |            |
|-------------------------|------------|--------------------|------------|
| Method Blank Number     | : RB050295 | Client I.D.        | : 722450.2 |
| Date Extracted/Prepared | : 05/02/95 |                    | : SJAFB    |
| Date Analyzed           | : 05/02/95 | Lab Project No.    | : 95-1240  |
|                         |            | Effective Dilution | : 1.00     |
|                         |            | Method             | : 624      |
|                         |            | Lab File No.       | : >L0501   |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | U             | 0.5                         |
| Toluene                             | 108-88-3   | U             | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | U             | 0.5                         |
| Total Xylenes                       | 1330-20-7  | U             | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | U             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | U             | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | U             | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | U             | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | U             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | U             | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

|                       |      | QC Limits |
|-----------------------|------|-----------|
| 1,2 Dichloroethane-d4 | 103% | (83-112)  |
| Toluene-d8            | 99%  | (93-104)  |
| Bromofluorobenzene    | 95%  | (87-105)  |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA

METHOD BLANK REPORT

Method Blank Number : RB050295 Client I.D. : 722450.2602 /  
Date Extracted/Prepared : 05/02/95 SJA  
Date Analyzed : 05/02/95 Lab Project No. : 95-1240  
Effective Dilution : 1.00  
Method : 624  
Lab File No. : >L0501

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 3             | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | U             | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | U             | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | U             | 1.0                         |
| Chloroform                | 67-66-3    | 2             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | U             | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | U             | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | 1             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | U             | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | U             | 0.5                         |
| Dibromochloromethane      | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | U             | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | U             | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | U             | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

1,2 Dichloroethane-d4 103%  
Toluene-d8 99%  
Bromofluorobenzene 95%

QC Limits

{83-112}  
{93-104}  
{87-105}

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |              |                    |             |
|-------------------------|--------------|--------------------|-------------|
| Client Sample Number    | : SAMPLE REF | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05933MS   |                    | SJAFB       |
| Date Sampled            | : NA         | Lab Project No.    | : 95-1240   |
| Date Received           | : NA         | Effective Dilution | : 1.00      |
| Date Extracted/Prepared | : 05/01/95   | Method             | : 624       |
| Date Analyzed           | : 05/01/95   | Matrix             | : WATER     |
|                         |              | Lab File No.       | : >L0494    |
|                         |              | Method Blank No.   | : RB050195  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | 480           | 152%     |
| Toluene                             | 108-88-3   | 45            | 95%      |
| Ethyl Benzene                       | 100-41-4   | 250           | 78%      |
| Total Xylenes                       | 1330-20-7  | 340           | 108%     |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 47 NS         | ---      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 110 NS        | ---      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 30 NS         | ---      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 31 NS         | ---      |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 34            | 74%      |
| Chlorobenzene                       | 108-90-7   | 21            | 103%     |
| Styrene                             | 100-42-5   | 23            | 116%     |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------|------------|---------------|----------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---      |
| Isopropyl ether         | 108-20-3   | 4 NS          | ---      |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---      |
| 1,3-Dichlorobenzene     | 541-73-1   | 20            | 100%     |
| 1,2-Dichlorobenzene     | 95-50-1    | 21            | 103%     |
| 1,4-Dichlorobenzene     | 106-46-7   | 19            | 95%      |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 101% |
| Toluene-d8            | 97%  |
| Bromofluorobenzene    | 98%  |

QC Limits

{83-112}  
{93-104}  
{87-105}

QUALIFIERS:

NS = Not spiked.  
U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
Target Compound List

|                         |              |                    |                 |
|-------------------------|--------------|--------------------|-----------------|
| Client Sample Number    | : SAMPLE REF | Client I.D.        | : 722450.2602 / |
| Lab Sample Number       | : X05933MS   |                    | SJAFB           |
| Date Sampled            | : NA         | Lab Project No.    | : 95-1240       |
| Date Received           | : NA         | Effective Dilution | : 1.00          |
| Date Extracted/Prepared | : 05/01/95   | Method             | : 624           |
| Date Analyzed           | : 05/01/95   | Matrix             | : WATER         |
|                         |              | Lab File No.       | : >L0494        |
|                         |              | Method Blank No.   | : RB050195      |

| Compound Name             | Cas Number | Conc.<br>ug/L | REC<br>% |
|---------------------------|------------|---------------|----------|
| Chloromethane             | 74-87-3    | 12            | 62%      |
| Bromomethane              | 74-83-9    | 18 B          | 80%      |
| Vinyl Chloride            | 75-01-4    | 12            | 60%      |
| Chloroethane              | 75-00-3    | 17            | 85%      |
| Methylene Chloride        | 75-09-2    | 22            | 110%     |
| Acetone                   | 67-64-1    | 24            | 120%     |
| Carbon Disulfide          | 75-15-0    | 19            | 94%      |
| 1,1-Dichloroethene        | 75-35-4    | 23            | 110%     |
| 1,1-Dichloroethane        | 75-34-3    | 21            | 103%     |
| Trans-1,2-Dichloroethene  | 156-60-5   | 20            | 98%      |
| Cis-1,2-Dichloroethene    | 156-59-2   | 320           | 109%     |
| Chloroform                | 67-66-3    | 25 B          | 123%     |
| 1,2-Dichloroethane        | 107-06-2   | 21            | 84%      |
| 2-Butanone                | 78-93-3    | 21            | 103%     |
| 1,1,1-Trichloroethane     | 71-55-6    | 18            | 88%      |
| Carbon Tetrachloride      | 56-23-5    | 19            | 93%      |
| Bromodichloromethane      | 75-27-4    | 19            | 95%      |
| Vinyl Acetate             | 108-05-4   | 17            | 85%      |
| 1,2-Dichloropropane       | 78-87-5    | 22            | 108%     |
| Trans-1,3-Dichloropropene | 10061-02-6 | 10            | 48%      |
| Trichloroethene           | 79-01-6    | 180           | 88%      |
| 1,1,2-Trichloroethane     | 79-00-5    | 21            | 105%     |
| Benzene                   | 71-43-2    | 480           | 152%     |
| Dibromochloromethane      | 124-48-1   | 19            | 97%      |
| Cis-1,3-Dichloropropene   | 10061-01-5 | 18            | 92%      |
| 2-Chloroethylvinyl Ether  | 110-75-8   | 1             | 7%       |
| Bromoform                 | 75-25-2    | 17            | 84%      |
| 4-Methyl-2-Pentanone      | 108-10-1   | 17            | 84%      |
| 2-Hexanone                | 591-78-6   | 23            | 113%     |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | 18            | 90%      |
| Tetrachloroethene         | 127-18-4   | 20            | 99%      |
| Toluene                   | 108-88-3   | 45            | 95%      |
| Chlorobenzene             | 108-90-7   | 21            | 103%     |
| Ethyl Benzene             | 100-41-4   | 250           | 78%      |
| Styrene                   | 100-42-5   | 23            | 116%     |
| Total Xylenes             | 1330-20-7  | 340           | 108%     |
| Trichlorofluoromethane    | 75-69-4    | 18            | 91%      |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 101% |
| Toluene-d8            | 97%  |
| Bromofluorobenzene    | 98%  |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |              |                    |               |
|-------------------------|--------------|--------------------|---------------|
| Client Sample Number    | : SAMPLE REF | Client I.D.        | : 722450.2600 |
| Lab Sample Number       | : X05923MS   | Lab Project No.    | : 95-1240     |
| Date Sampled            | : NA         | Effective Dilution | : 5.00        |
| Date Received           | : NA         | Method             | : 624         |
| Date Extracted/Prepared | : 05/02/95   | Matrix             | : WATER       |
| Date Analyzed           | : 05/02/95   | Lab File No.       | : >L0505      |
|                         |              | Method Blank No.   | : RB050295    |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | 890           | 56%      |
| Toluene                             | 108-88-3   | 110           | 101%     |
| Ethyl Benzene                       | 100-41-4   | 190           | 92%      |
| Total Xylenes                       | 1330-20-7  | 120           | 74%      |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | NS            | ---      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 13 NS         | ---      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 5 NS          | ---      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 23 NS         | ---      |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 48            | 48%      |
| Chlorobenzene                       | 108-90-7   | 100           | 100%     |
| Styrene                             | 100-42-5   | 4             | 4%       |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---                         |
| Isopropyl ether         | 108-20-3   | 28 NS         | ---                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---                         |
| 1,3-Dichlorobenzene     | 541-73-1   | 100           | 100%                        |
| 1,2-Dichlorobenzene     | 95-50-1    | 100           | 100%                        |
| 1,4-Dichlorobenzene     | 106-46-7   | 94            | 94%                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 99% |
| Toluene-d8            | 97% |
| Bromofluorobenzene    | 96% |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

NS = Not spiked.  
U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

VOLATILE ORGANICS ANALYSIS DATA

Client Sample Number : SAMPLE REF Client I.D. : 722450.2602 /  
Lab Sample Number : X05923MS SJAFB  
Date Sampled : NA Lab Project No. : 95-1240  
Date Received : NA Effective Dilution : 5.00  
Date Extracted/Prepared : 05/02/95 Method : 624  
Date Analyzed : 05/02/95 Matrix : WATER  
Lab File No. : >L0505  
Method Blank No. : RB050295

| Compound Name             | Cas Number | Conc.<br>ug/L | REC<br>% |
|---------------------------|------------|---------------|----------|
| Chloromethane             | 74-87-3    | 54            | 54%      |
| Bromomethane              | 74-83-9    | 89 B          | 89%      |
| Vinyl Chloride            | 75-01-4    | 61            | 61%      |
| Chloroethane              | 75-00-3    | 89            | 89%      |
| Methylene Chloride        | 75-09-2    | 110           | 110%     |
| Acetone                   | 67-64-1    | 142           | 142%     |
| Carbon Disulfide          | 75-15-0    | 100           | 100%     |
| 1,1-Dichloroethene        | 75-35-4    | 130           | 130%     |
| 1,1-Dichloroethane        | 75-34-3    | 120           | 120%     |
| Trans-1,2-Dichloroethene  | 156-60-5   | 99            | 99%      |
| Cis-1,2-Dichloroethene    | 156-59-2   | 140           | 140%     |
| Chloroform                | 67-66-3    | 130 B         | 130%     |
| 1,2-Dichloroethane        | 107-06-2   | 110           | 110%     |
| 2-Butanone                | 78-93-3    | 95            | 95%      |
| 1,1,1-Trichloroethane     | 71-55-6    | 97            | 97%      |
| Carbon Tetrachloride      | 56-23-5    | 100           | 100%     |
| Bromodichloromethane      | 75-27-4    | 96 B          | 96%      |
| Vinyl Acetate             | 108-05-4   | 63            | 63%      |
| 1,2-Dichloropropane       | 78-87-5    | 100           | 100%     |
| Trans-1,3-Dichloropropene | 10061-02-6 | 54            | 54%      |
| Trichloroethene           | 79-01-6    | 190           | 190%     |
| 1,1,2-Trichloroethane     | 79-00-5    | 100           | 100%     |
| Benzene                   | 71-43-2    | 890           | 56%      |
| Bromochloromethane        | 124-48-1   | 92            | 92%      |
| Cis-1,3-Dichloropropene   | 10061-01-5 | 98            | 98%      |
| 2-Chloroethylvinyl Ether  | 110-75-8   | 21            | 21%      |
| Bromoform                 | 75-25-2    | 82            | 82%      |
| 4-Methyl-2-Pentanone      | 108-10-1   | 90            | 90%      |
| 2-Hexanone                | 591-78-6   | 82            | 82%      |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | 84            | 84%      |
| Tetrachloroethene         | 127-18-4   | 110           | 110%     |
| Toluene                   | 108-88-3   | 110           | 110%     |
| Chlorobenzene             | 108-90-7   | 100           | 100%     |
| Ethyl Benzene             | 100-41-4   | 190           | 190%     |
| Styrene                   | 100-42-5   | 4             | 4%       |
| Total Xylenes             | 1330-20-7  | 120           | 120%     |
| Trichlorofluoromethane    | 75-69-4    | 94            | 94%      |

Surrogate Recoveries:

1,2 Dichloroethane-d4 99%  
Toluene-d8 97%  
Bromofluorobenzene 96%

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |               |
|-------------------------|------------|--------------------|---------------|
| Client Sample Number    | : 624 REF  | Client I.D.        | : 722450.2002 |
| Lab Sample Number       | : 624 REF  |                    | SJAFB         |
| Date Sampled            | : NA       | Lab Project No.    | : 95-1240     |
| Date Received           | : NA       | Effective Dilution | : 1.00        |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624         |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER       |
|                         |            | Lab File No.       | : >L0506      |
|                         |            | Method Blank No.   | : RB050295    |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | 22            | 109%     |
| Toluene                             | 108-88-3   | 21            | 105%     |
| Ethyl Benzene                       | 100-41-4   | 22            | 109%     |
| Total Xylenes                       | 1330-20-7  | 24            | 118%     |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | NS            | ---      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | NS            | ---      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | NS            | ---      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | NS            | ---      |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 8             | 40%      |
| Chlorobenzene                       | 108-90-7   | 23            | 114%     |
| Styrene                             | 100-42-5   | 22            | 110%     |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit<br>ug/L |
|-------------------------|------------|---------------|----------------------------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---                        |
| Isopropyl ether         | 108-20-3   | NS            | ---                        |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---                        |
| 1,3-Dichlorobenzene     | 541-73-1   | 22            | 108%                       |
| 1,2-Dichlorobenzene     | 95-50-1    | 22            | 108%                       |
| 1,4-Dichlorobenzene     | 106-46-7   | 20            | 102%                       |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 107% |
| Toluene-d8            | 100% |
| Bromofluorobenzene    | 98%  |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

NS = Not spiked.  
U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

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4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA

|                         |            |                    |                 |
|-------------------------|------------|--------------------|-----------------|
| Client Sample Number    | : 624 REF  | Client I.D.        | : 722450.2602 / |
| Lab Sample Number       | : 624 REF  |                    |                 |
| Date Sampled            | : NA       | Lab Project No.    | : 95-1240       |
| Date Received           | : NA       | Effective Dilution | : 1.00          |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624           |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER         |
|                         |            | Lab File No.       | : >L0506        |
|                         |            | Method Blank No.   | : RB050295      |

| Compound Name             | Cas Number | Conc.<br>ug/L | REC<br>% |
|---------------------------|------------|---------------|----------|
| Chloromethane             | 74-87-3    | 11            | 56%      |
| Bromomethane              | 74-83-9    | 19 B          | 97%      |
| Vinyl Chloride            | 75-01-4    | 13            | 64%      |
| Chloroethane              | 75-00-3    | 19            | 95%      |
| Methylene Chloride        | 75-09-2    | 23            | 115%     |
| Acetone                   | 67-64-1    | 29            | 145%     |
| Carbon Disulfide          | 75-15-0    | 21            | 107%     |
| 1,1-Dichloroethene        | 75-35-4    | 25            | 127%     |
| 1,1-Dichloroethane        | 75-34-3    | 22            | 111%     |
| Trans-1,2-Dichloroethene  | 156-60-5   | 21            | 106%     |
| Cis-1,2-Dichloroethene    | 156-59-2   | 23            | 116%     |
| Chloroform                | 67-66-3    | 26 B          | 128%     |
| 1,2-Dichloroethane        | 107-06-2   | 23            | 115%     |
| 2-Butanone                | 78-93-3    | 22            | 108%     |
| 1,1,1-Trichloroethane     | 71-55-6    | 20            | 99%      |
| Carbon Tetrachloride      | 56-23-5    | 22            | 112%     |
| Bromodichloromethane      | 75-27-4    | 21 B          | 104%     |
| Vinyl Acetate             | 108-05-4   | 6             | 32%      |
| 1,2-Dichloropropane       | 78-87-5    | 22            | 112%     |
| Trans-1,3-Dichloropropene | 10061-02-6 | 12            | 62%      |
| Trichloroethene           | 79-01-6    | 25            | 124%     |
| 1,1,2-Trichloroethane     | 79-00-5    | 22            | 112%     |
| Benzene                   | 71-43-2    | 22            | 109%     |
| Dibromochloromethane      | 124-48-1   | 21            | 103%     |
| Cis-1,3-Dichloropropene   | 10061-01-5 | 22            | 112%     |
| 2-Chloroethylvinyl Ether  | 110-75-8   | 4             | 19%      |
| Bromoform                 | 75-25-2    | 18            | 89%      |
| 4-Methyl-2-Pentanone      | 108-10-1   | 22            | 110%     |
| 2-Hexanone                | 591-78-6   | 21            | 106%     |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | 19            | 94%      |
| Tetrachloroethene         | 127-18-4   | 23            | 117%     |
| Toluene                   | 108-88-3   | 21            | 105%     |
| Chlorobenzene             | 108-90-7   | 23            | 114%     |
| Ethyl Benzene             | 100-41-4   | 22            | 109%     |
| Styrene                   | 100-42-5   | 22            | 110%     |
| Total Xylenes             | 1330-20-7  | 24            | 118%     |
| Trichlorofluoromethane    | 75-69-4    | 20            | 100%     |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 107% |
| Toluene-d8            | 100% |
| Bromofluorobenzene    | 98%  |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |            |
|-------------------------|------------|--------------------|------------|
| Client Sample Number    | : TMB LFB  | Client I.D.        | : 722450.2 |
| Lab Sample Number       | : TMB LFB  |                    | : SJAFB    |
| Date Sampled            | : NA       | Lab Project No.    | : 95-1240  |
| Date Received           | : NA       | Effective Dilution | : 5.00     |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624      |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER    |
|                         |            | Lab File No.       | : >L0507   |
|                         |            | Method Blank No.   | : TMB LFB  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | NS            | ---      |
| Toluene                             | 108-88-3   | NS            | ---      |
| Ethyl Benzene                       | 100-41-4   | NS            | ---      |
| Total Xylenes                       | 1330-20-7  | NS            | ---      |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 18            | 90%      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 17            | 85%      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 19            | 94%      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 21            | 107%     |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | NS            | ---      |
| Chlorobenzene                       | 108-90-7   | NS            | ---      |
| Styrene                             | 100-42-5   | NS            | ---      |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------|------------|---------------|----------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---      |
| Isopropyl ether         | 108-20-3   | NS            | ---      |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---      |
| 1,3-Dichlorobenzene     | 541-73-1   | NS            | ---      |
| 1,2-Dichlorobenzene     | 95-50-1    | NS            | ---      |
| 1,4-Dichlorobenzene     | 106-46-7   | NS            | ---      |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 106% |
| Toluene-d8            | 102% |
| Bromofluorobenzene    | 99%  |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

NS = Not spiked.  
U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH-GASOLINE)

|               |                 |                       |                          |
|---------------|-----------------|-----------------------|--------------------------|
| Date Sampled  | : 4/17/95       | Client Project Number | : 722450.2602            |
| Date Received | : 4/18/95       | Lab Project Number    | : 95-1240                |
| Date Prepared | : 04/30-5/01/95 | Matrix                | : Water                  |
| Date Analyzed | : 4/30-5/01/95  | Method Number         | : EPA 5030/8015 Modified |

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample #</u> | <u>Surrogate<br/>Recovery</u> | <u>TVH<br/>mg/L</u> | <u>RL<br/>mg/L</u> |
|-------------------------------|----------------------------|-------------------------------|---------------------|--------------------|
| MB050195                      | METHOD BLANK               | 103%                          | U                   | 0.1                |
| MB050195B                     | METHOD BLANK               | 100%                          | U                   | 0.1                |
| X05829                        | MW-6                       | 100%                          | U                   | 0.1                |
| X05830                        | MW-7                       | 101%                          | U                   | 0.1                |
| X05830 DUP                    | MW-7                       | 100%                          | U                   | 0.1                |
| X05831                        | MW-10                      | 101%                          | U                   | 0.1                |
| X05832                        | MW-11                      | 82%                           | 18                  | 0.5                |
| X05834                        | CPT-16                     | 103%                          | 14                  | 0.5                |

QUALIFIERS


U = TVH analyzed for but not detected.

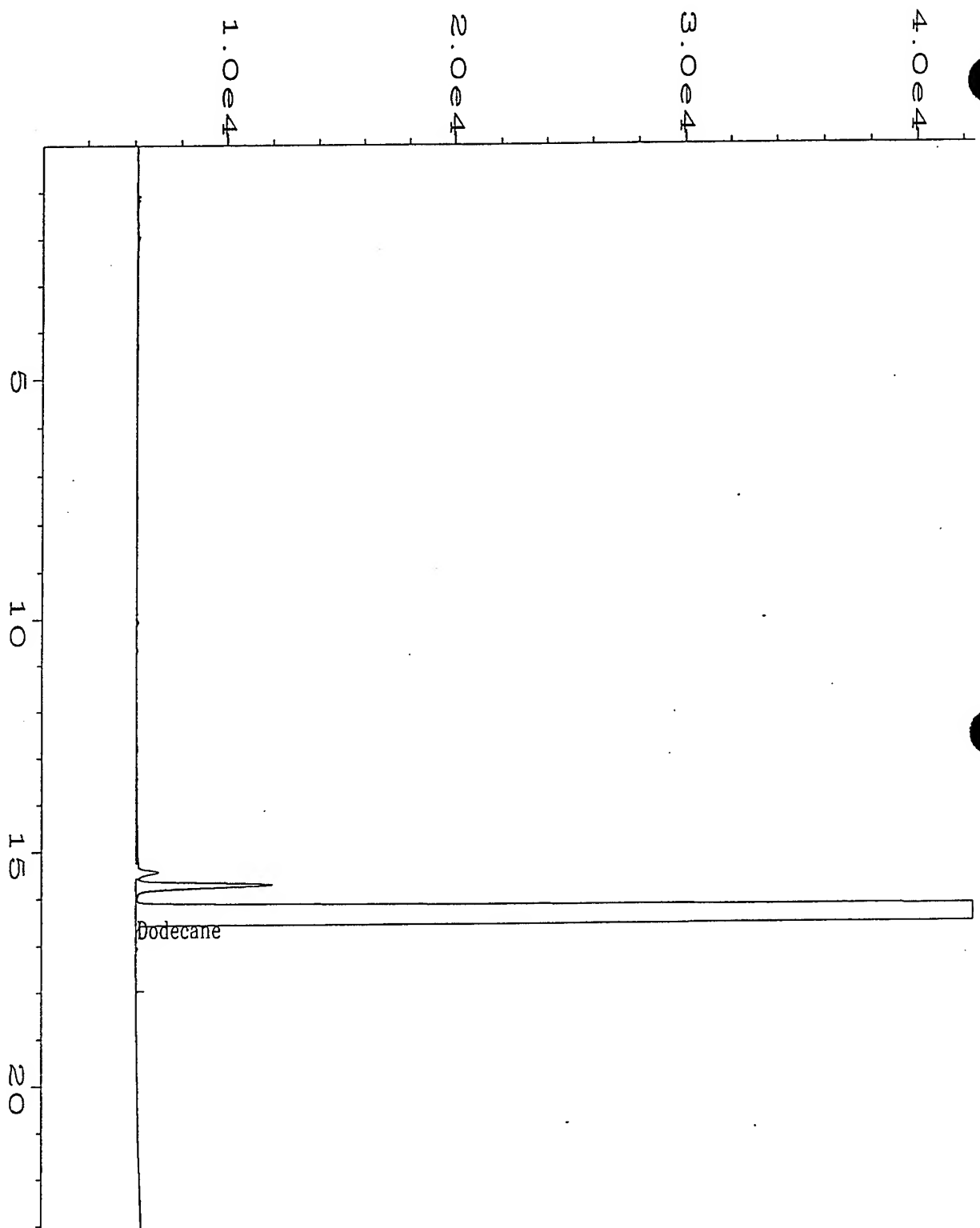
B = TVH found in blank also.

E = Extrapolated value.

RL = Reporting Limit.

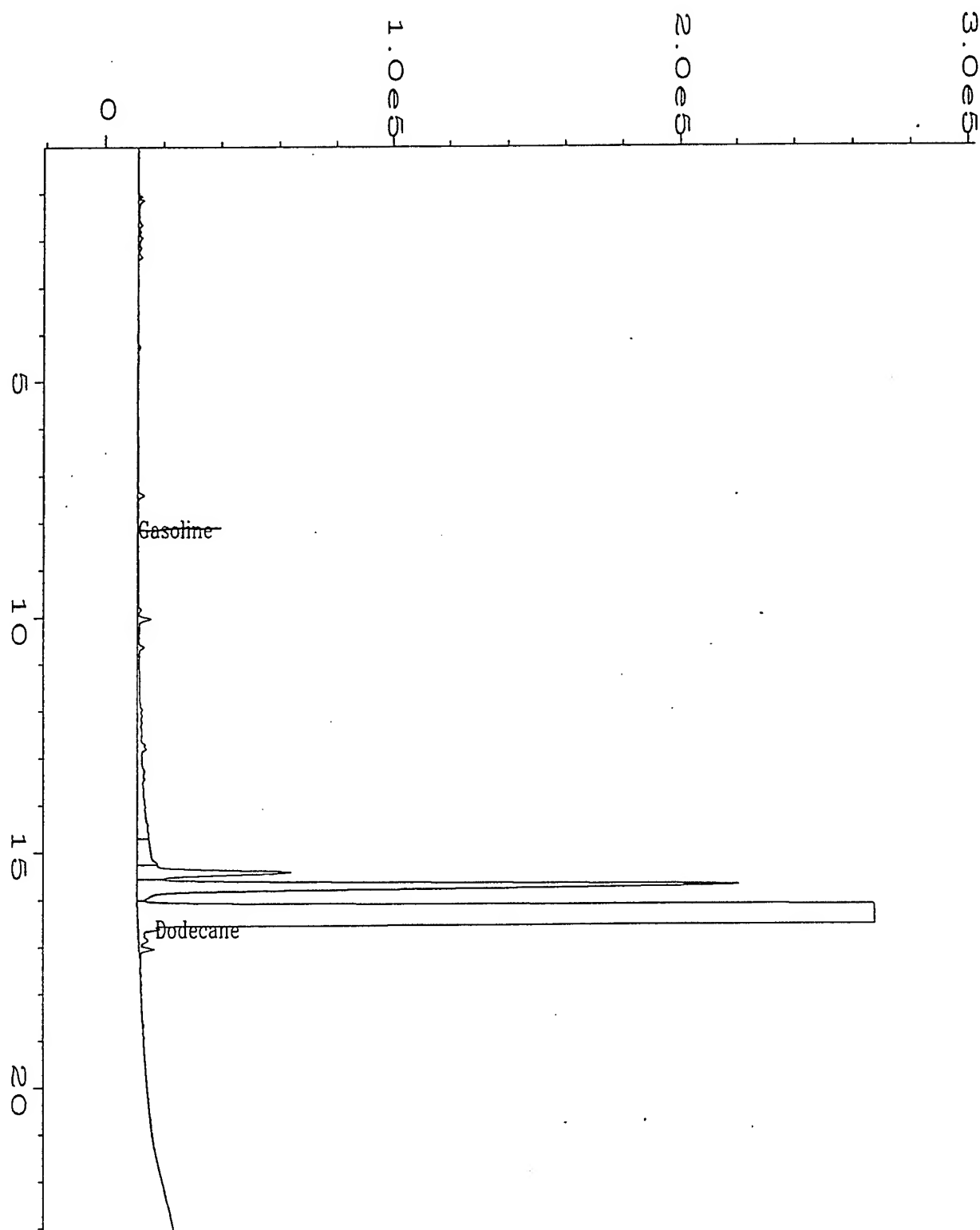
  
Analyst

  
Approved



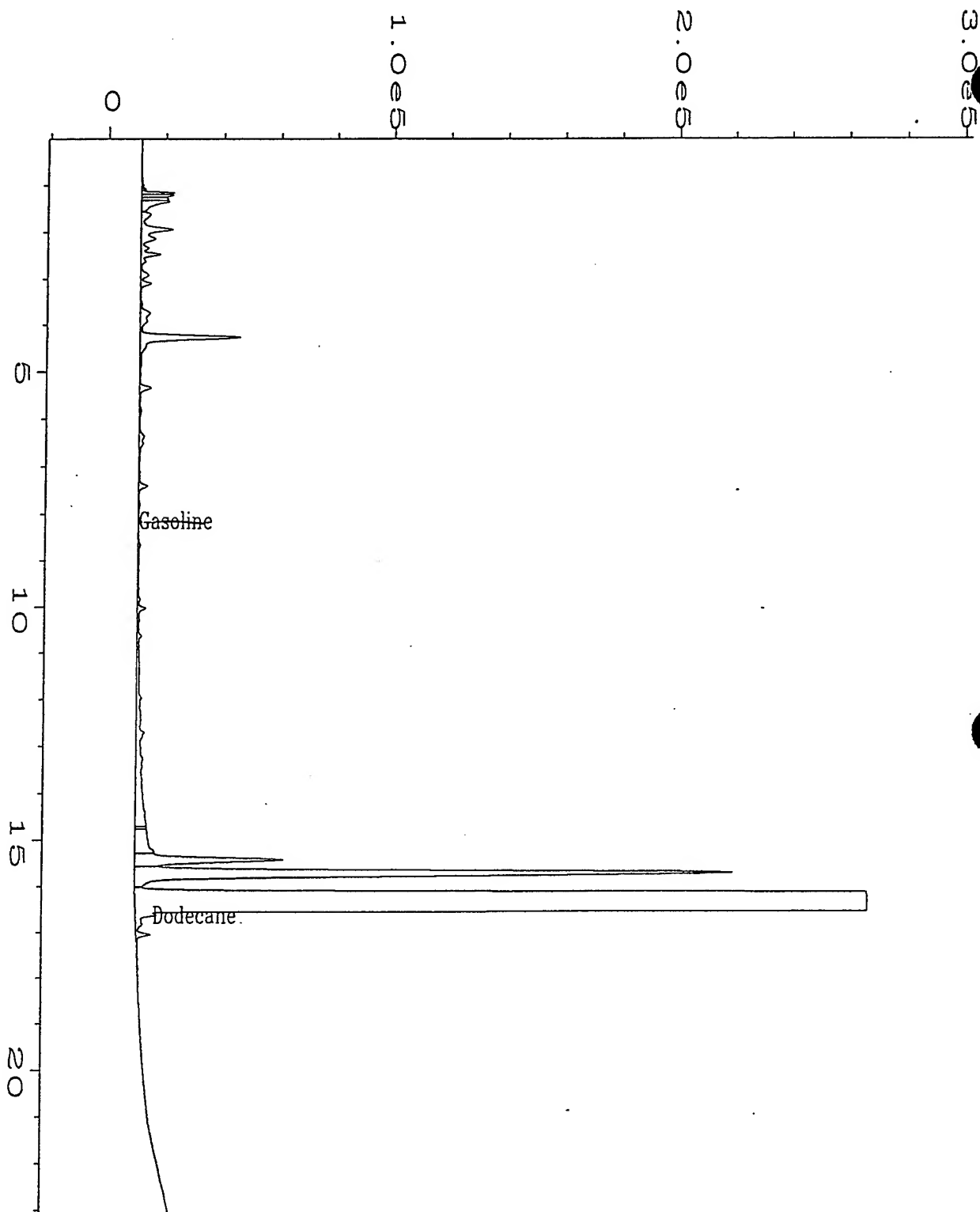
user modified

|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : D:\HPCHEM\1\DATA\TVH0430\009F0101.D | Page Number       | : 1          |
| Operator           | : S.W. Tyson                          | Vial Number       | : 9          |
| Instrument         | : TVH                                 | Injection Number  | : 1          |
| Sample Name        | : MB050195                            | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BA.M   |
| quired on          | : 30 Apr 95 11:58 PM                  | Analysis Method   | : TVH0430.MT |
| Report Created on: | : 03 May 95 05:37 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 01 MAY 95 08:09 AM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0501\008F0101.D | Page Number       | : 1            |
| Operator           | : S.W. Tyson                          | Vial Number       | : 8            |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : MB050195B                           | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Printed on         | : 01 May 95 07:19 PM                  | Analysis Method   | : TVH0501.MTH  |
| Report Created on: | 02 May 95 10:19 AM                    | Sample Amount     | : 0            |
| Last Recalib on    | : 01 MAY 95 05:39 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

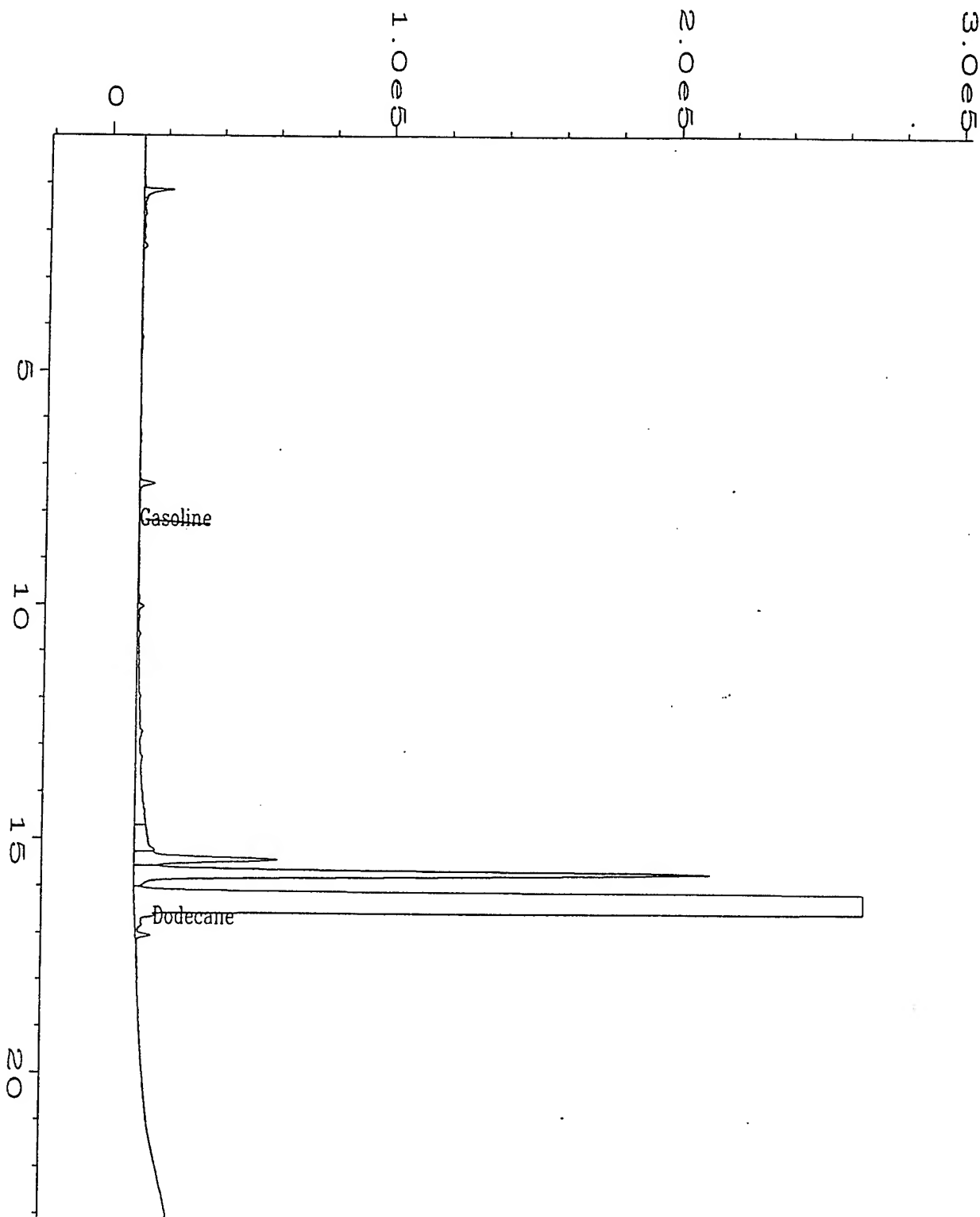
*pm 5/10/95*



|                    |                                       |                    |             |
|--------------------|---------------------------------------|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\009F0101.D | Page Number        | : 1         |
| Operator           | : S.W. Tyson                          | Vial Number        | : 9         |
| Instrument         | : TVH                                 | Injection Number   | : 1         |
| Sample Name        | : X05829;1                            | Sequence Line      | : 1         |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BA.M    |
| Acquired on        | : 01 May 95 07:54 PM                  | Analysis Method    | : TVH0501.M |
| Report Created on: | 01 May 95 08:18 PM                    | Sample Amount      | : 0         |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :           |
| Multiplier         | : 1                                   |                    |             |

5/10/95

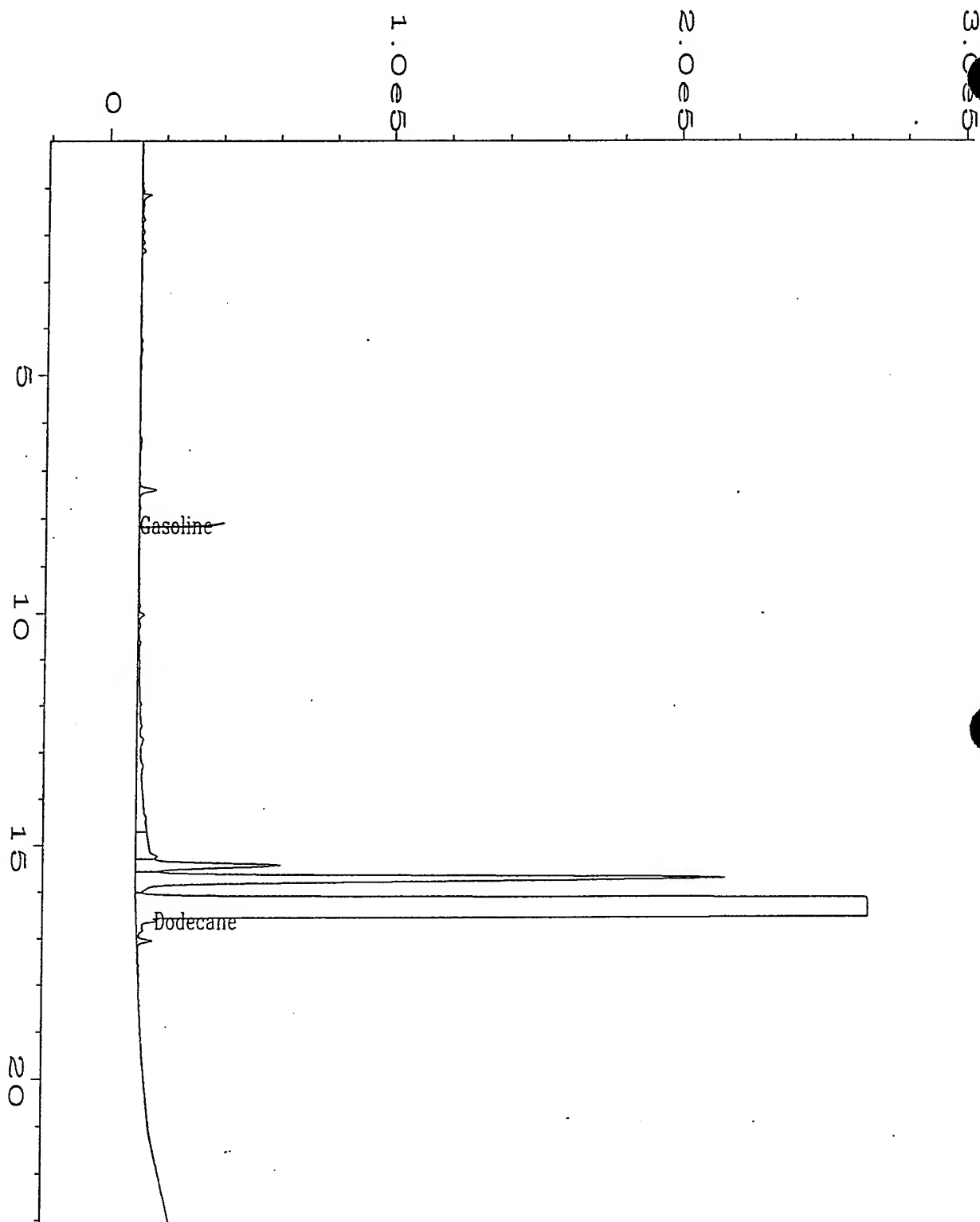
MW-6



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\010F0101.D | Page Number       | : 1            |
| Operator           | : S.W. Tyson                          | Vial Number       | : 10           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05830;1                            | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 01 May 95 08:29 PM                  | Analysis Method   | : TVH0501.MTH  |
| Port Created on    | : 01 May 95 08:54 PM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

Done 5/10/95

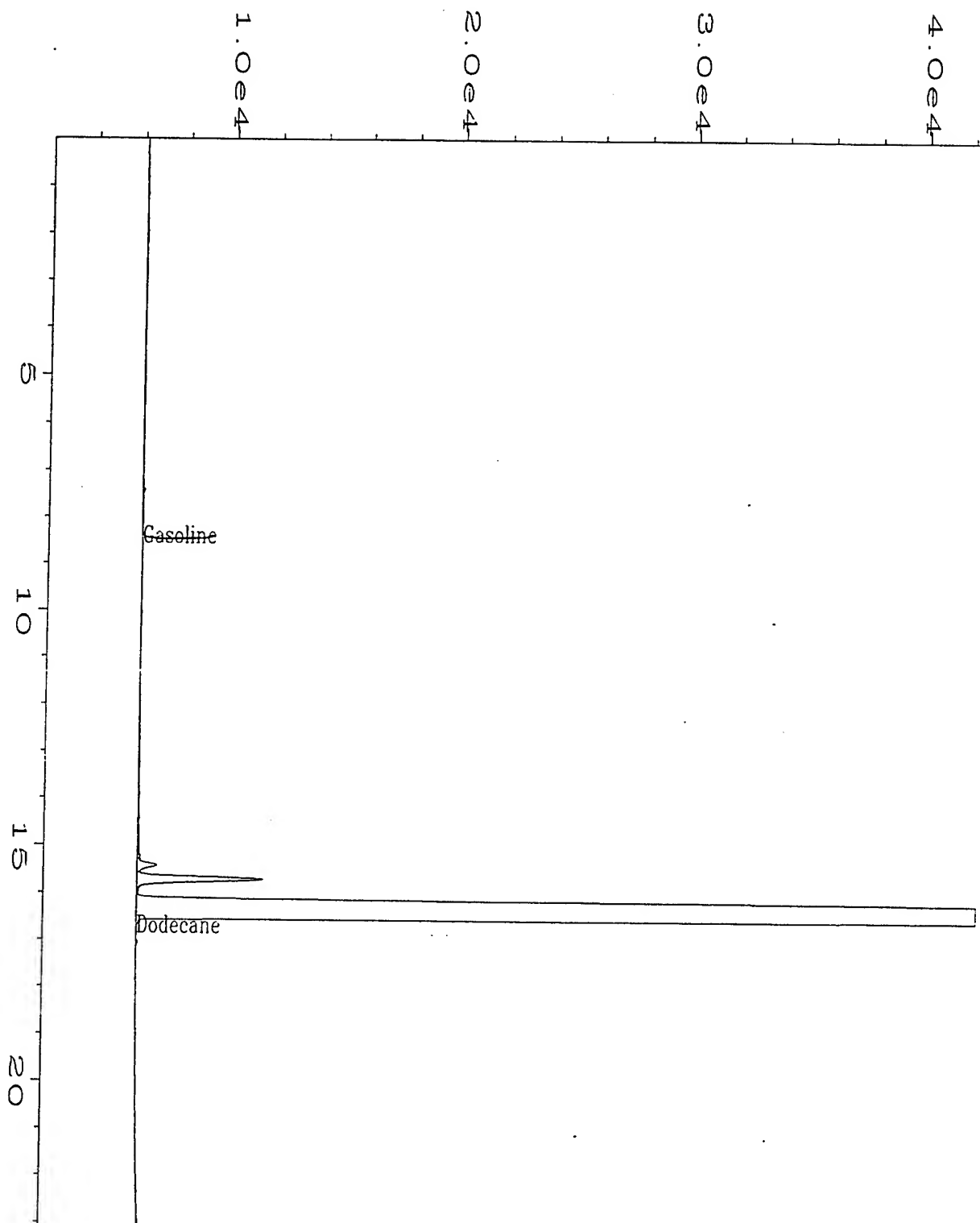
MW-7



|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\011F0101.D | Page Number       | : 1          |
| Operator           | : S.W. Tyson                          | Vial Number       | : 11         |
| Instrument         | : TVH                                 | Injection Number  | : 1          |
| Sample Name        | : X05830Dupl;1                        | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BA.M   |
| quired on          | : 01 May 95 09:04 PM                  | Analysis Method   | : TVH0501.MT |
| Report Created on: | : 01 May 95 09:30 PM                  | Sample Amount     | : 0          |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |

pm 5/10/95

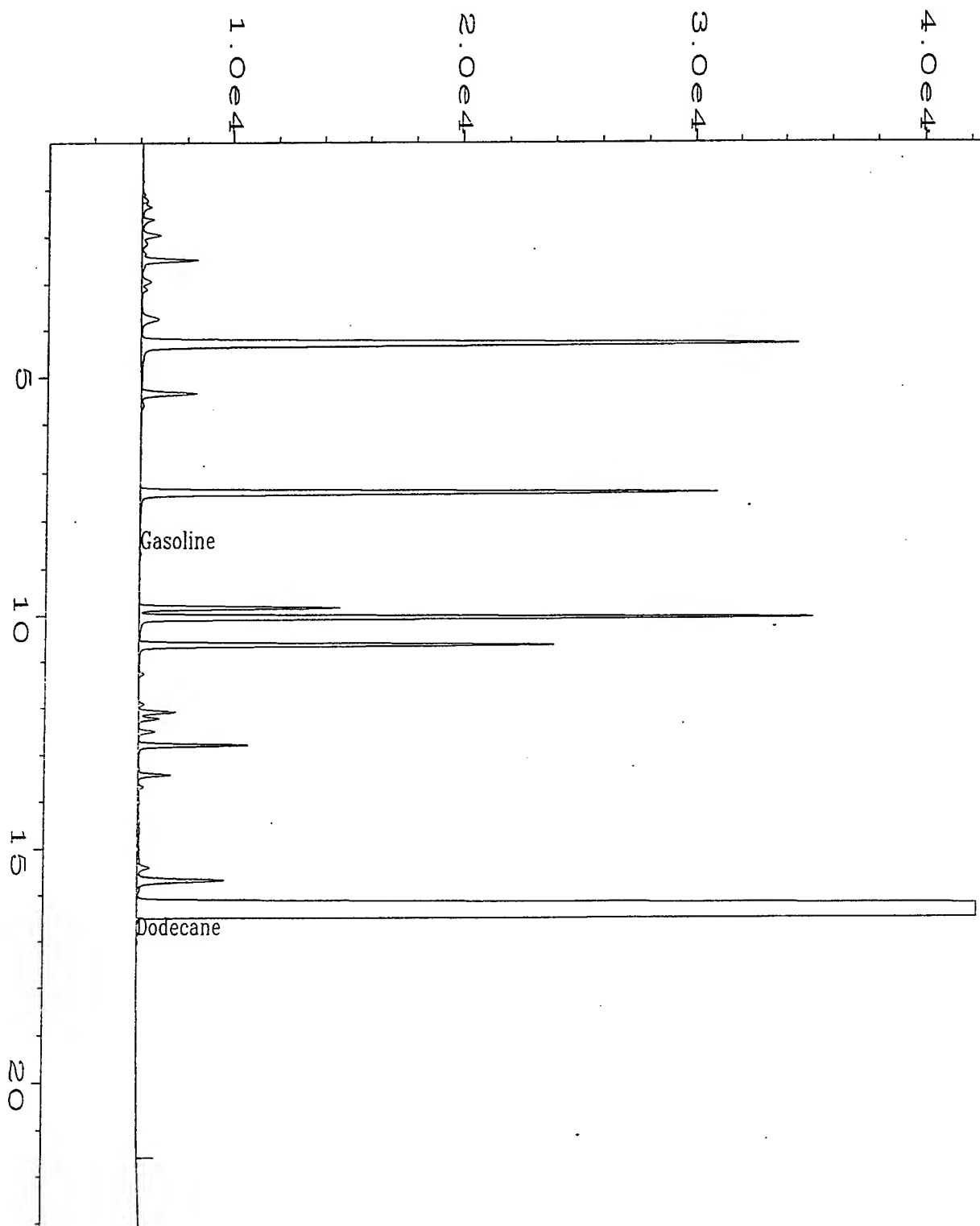
MW-7 dup



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : D:\HPCHEM\1\DATA\TVH0430\015F0101.D | Page Number        | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number        | : 15          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X05831;1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Acquired on        | : 01 May 95 03:28 AM                  | Analysis Method    | : TVH0430.MTH |
| Report Created on: | 03 May 95 05:41 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 01 MAY 95 08:09 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

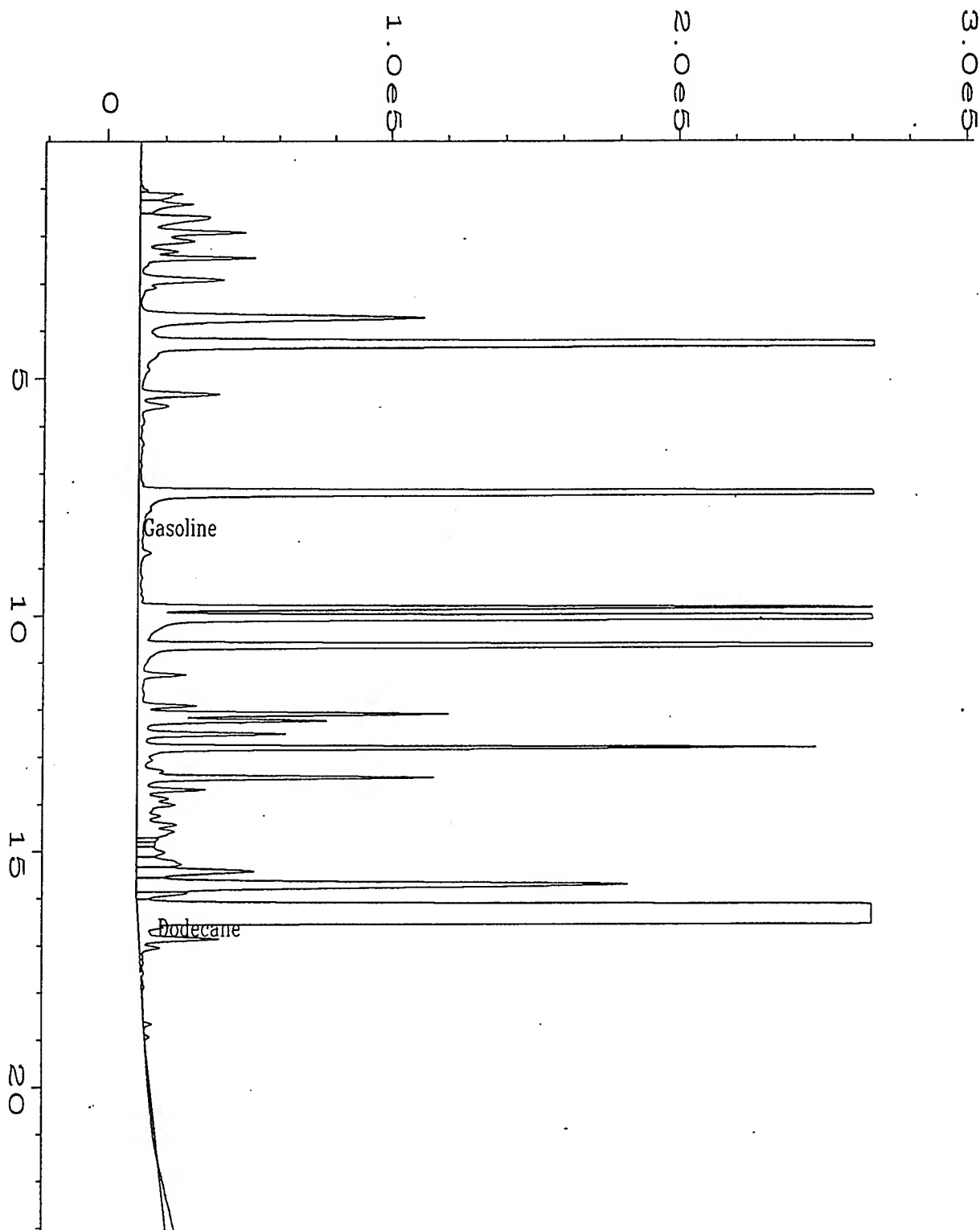
pm 5/10/95

MW-810



|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : D:\HPCHEM\1\DATA\TVH0430\016F0101.D | Page Number        | : 1          |
| Operator           | : S.W. Tyson                          | Vial Number        | : 16         |
| Instrument         | : TVH                                 | Injection Number   | : 1          |
| Sample Name        | : X05832;5                            | Sequence Line      | : 1          |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BAS.MT   |
| Acquired on        | : 01 May 95 04:03 AM                  | Analysis Method    | : TVH0430.MT |
| Report Created on: | 03 May 95 05:42 PM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 01 MAY 95 08:09 AM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |

mw-11



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\012F0101.D | Page Number        | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number        | : 12          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X05834;5                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Printed on         | : 01 May 95 09:38 PM                  | Analysis Method    | : TVH0501.MTH |
| Report Created on: | 01 May 95 10:03 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

CPT-16

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
TVH Matrix Spike/Matrix Spike Duplicate Data Report

|                   |           |                    |                      |
|-------------------|-----------|--------------------|----------------------|
| Client Sample No. | : MW-6    | Client Project No. | : 722450.2602        |
| Lab Sample No.    | : X05829  | Lab Project No.    | : 95-1240            |
| Date Sampled      | : 4/17/95 | EPA Method No.     | : 5030/8015 Modified |
| Date Received     | : 4/18/95 | Matrix             | : SOIL               |
| Date Prepared     | : 5/1/95  | Method Blank       | : MB050195           |
| Date Analyzed     | : 5/1/95  |                    |                      |

| Compound | Spike Added (mg/L) | Sample Concentration (mg/L) | MS Concentration (mg/L) | MS %REC | QC Limits %REC |
|----------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Gasoline | 2.00               | 0.00                        | 1.76                    | 88%     | 60-140         |

| Compound | Spike Added (mg/L) | MSD Concentration (mg/L) | MSD %REC | RPD | QC Limits |        |
|----------|--------------------|--------------------------|----------|-----|-----------|--------|
|          |                    |                          |          |     | RPD       | %REC   |
| Gasoline | 2.00               | 1.59                     | 80%      | 10  | 50        | 60-140 |

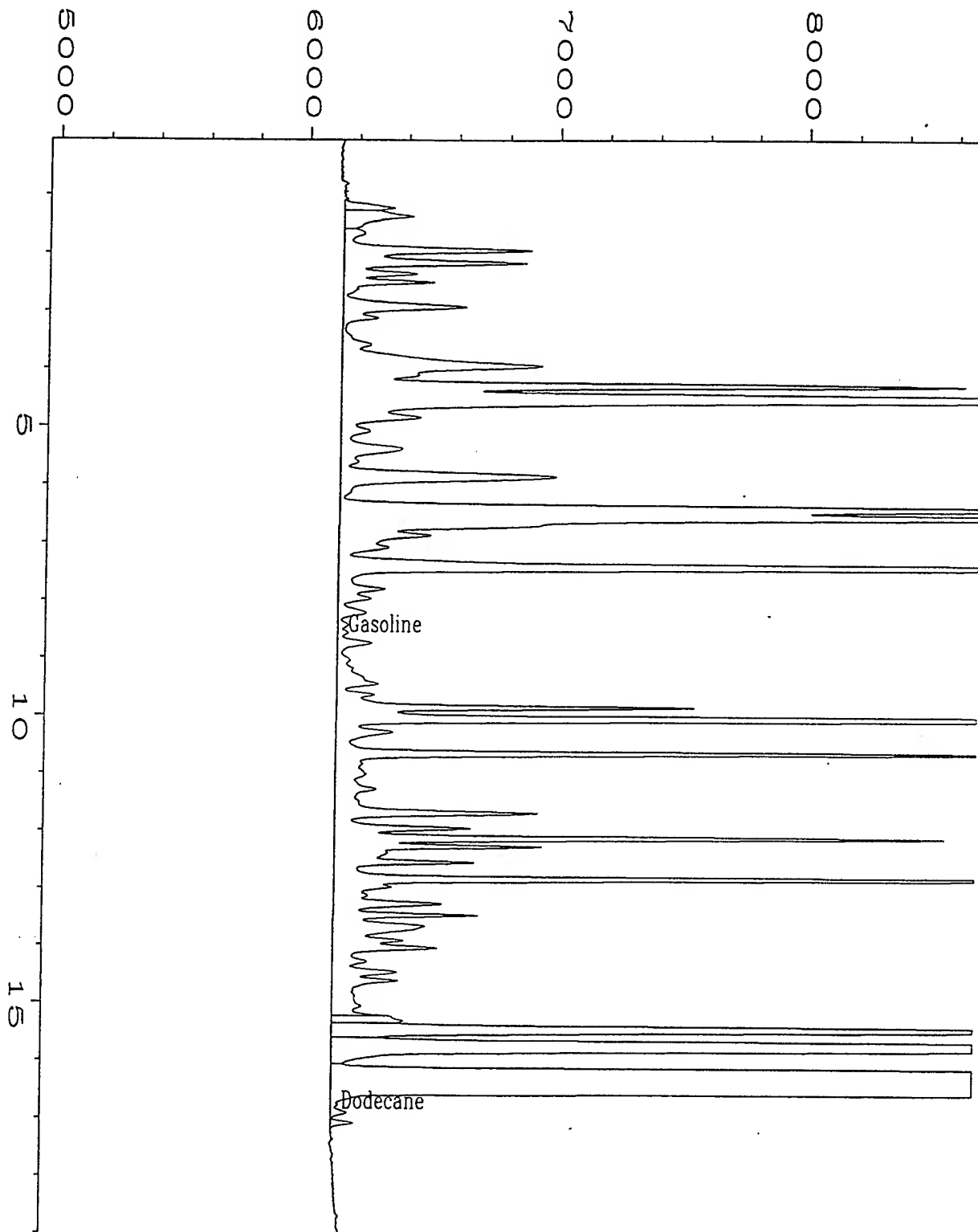
\* = Values outside of QC limits.

RPD: 0 out of (1) outside limits.  
Spike Recovery: 0 out of (2) outside limits.

NA = Not analyzed/not applicable.

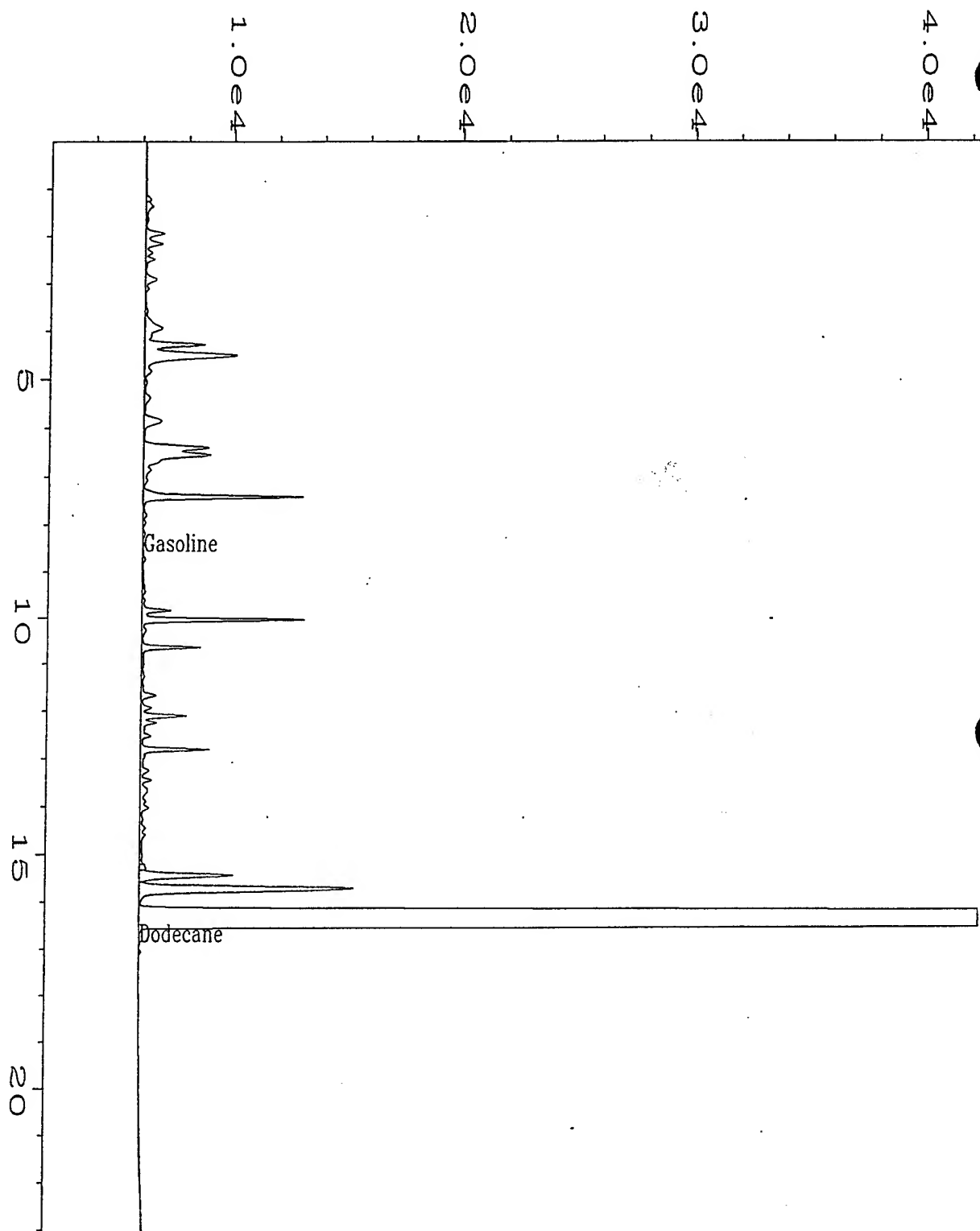
Comments:

*K. Cone*



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : D:\HPCHEM\1\DATA\TVH0430\011F0101.D | Page Number       | : 1            |
| Operator           | : S.W. Tyson                          | Vial Number       | : 11           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05829MS                            | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Printed on         | : 01 May 95 01:08 AM                  | Analysis Method   | : TVH0430.MTH  |
| Port Created on    | : 03 May 95 05:27 PM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 01 MAY 95 08:09 AM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

MW-6 ms



|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : D:\HPCHEM\1\DATA\TVH0430\012F0101.D | Page Number        | : 1          |
| Operator           | : S.W. Tyson                          | Vial Number        | : 12         |
| Instrument         | : TVH                                 | Injection Number   | : 1          |
| Sample Name        | : X05829MSD                           | Sequence Line      | : 1          |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BA.M     |
| Acquired on        | : 01 May 95 01:43 AM                  | Analysis Method    | : TVH0430.MT |
| Report Created on: | 03 May 95 05:28 PM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 01 MAY 95 08:09 AM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |

MW-6 MSD

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

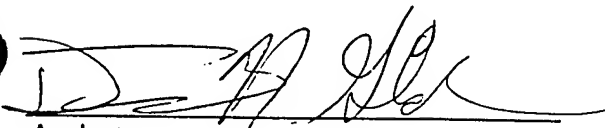
TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
Laboratory Control Sample (LCS)

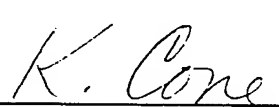
LCS Number : LCS050195B      Matrix : WATER  
Date Prepared : 5/1/95      Method Numbers : EPA 5030/8015 Modified  
Date Analyzed : 5/1/95  
Sequence Number : TVH0501007

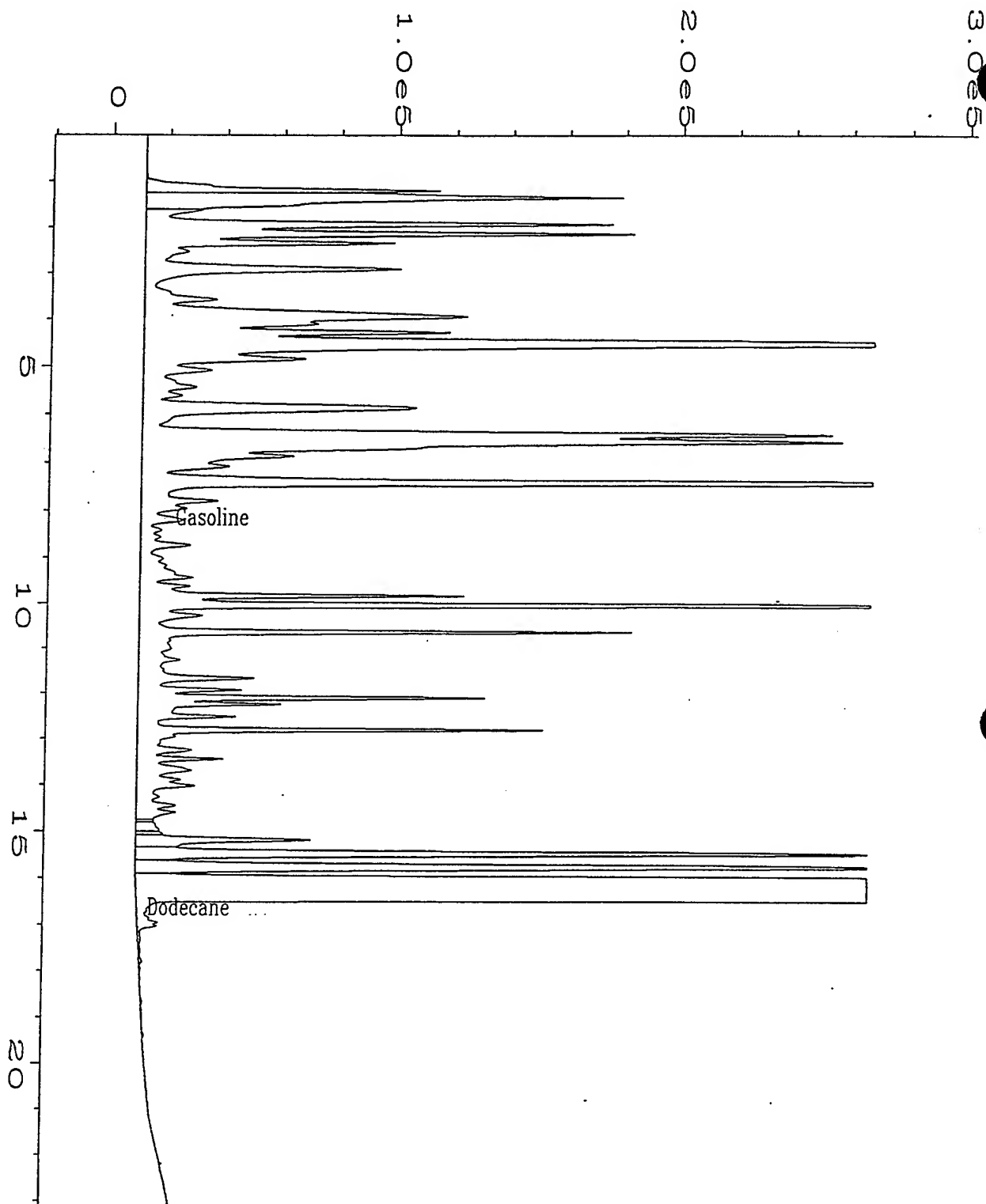
| <u>Compound Name</u> | <u>Theoretical Concentration mg/L</u> | <u>LCS Concentration mg/L</u> | <u>LCS % Recovery</u> | <u>QC Limit % Recovery</u> |
|----------------------|---------------------------------------|-------------------------------|-----------------------|----------------------------|
| Gasoline             | 5.00                                  | 5.11                          | 102%                  | 70%-130%                   |

QUALIFIERS

U = TVH analyzed for but not detected.  
B = TVH as Gasoline found in blank also.  
E = Extrapolated value.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\007F0101.D | Page Number       | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number       | : 7           |
| Instrument         | : TVH                                 | Injection Number  | : 1           |
| Sample Name        | : LCS050195                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BAS     |
| Acquired on        | : 01 May 95 06:44 PM                  | Analysis Method   | : TVH0501.MTH |
| Report Created on: | : 01 May 95 07:08 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
Laboratory Control Sample (LCS)

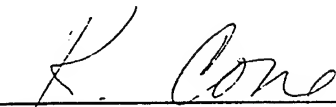
LCS Number : LCS050195      Matrix : WATER  
Date Prepared : 4/30/95      Method Numbers : EPA 5030/8015 Modified  
Date Analyzed : 4/30/95  
Sequence Number : TVH0430008

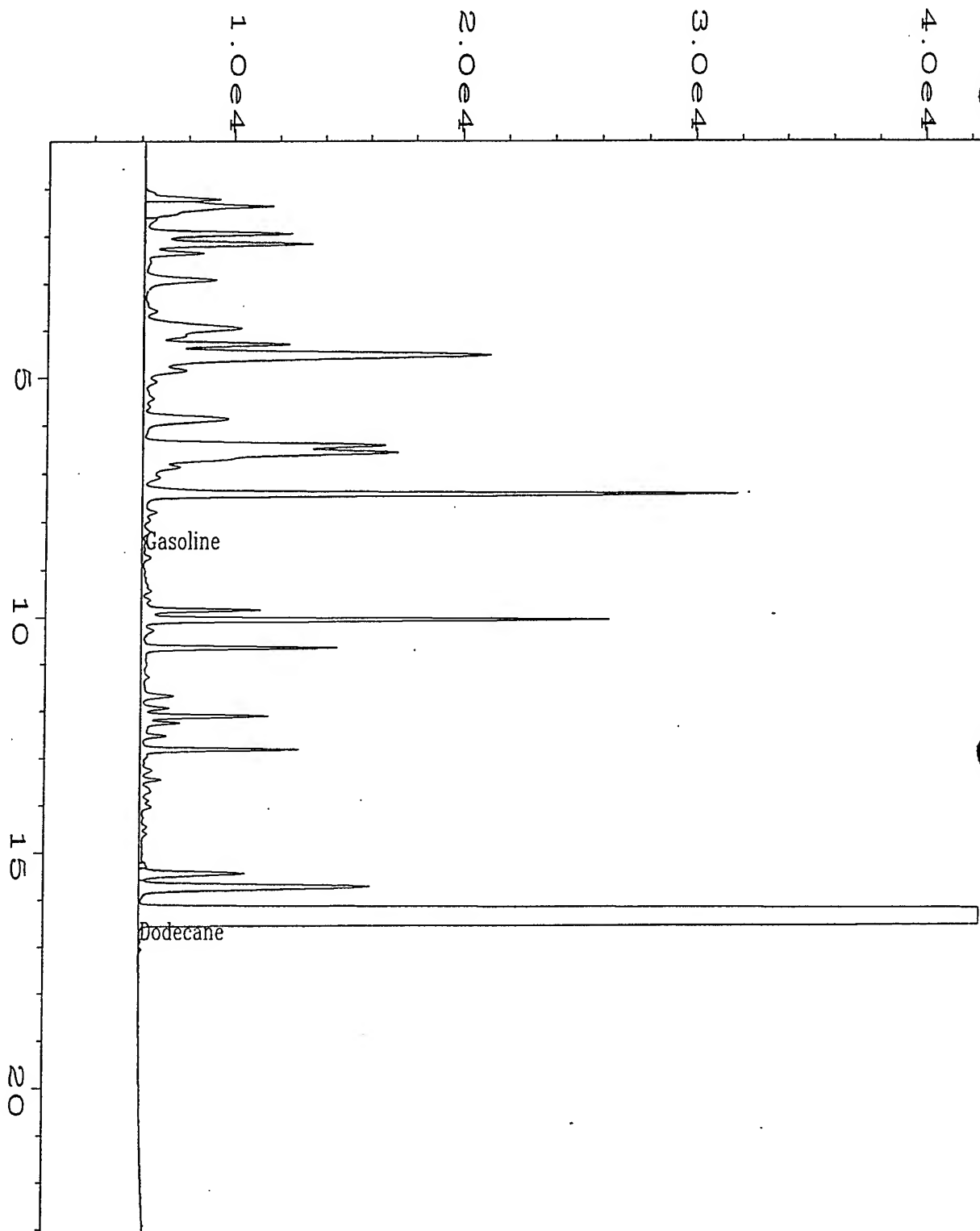
| <u>Compound<br/>Name</u> | <u>Theoretical<br/>Concentration<br/>mg/L</u> | <u>LCS<br/>Concentration<br/>mg/ L</u> | <u>LCS<br/>%<br/>Recovery</u> | <u>QC Limit<br/>% Recovery</u> |
|--------------------------|---|--|-------------------------------|--------------------------------|
| Gasoline                 | 5.00  | 6.34                                   | 127%                          | 70%-130%                       |

QUALIFIERS

U = TVH analyzed for but not detected.  
B = TVH as Gasoline found in blank also.  
E = Extrapolated value.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |             |
|--------------------|---------------------------------------|--------------------|-------------|
| Data File Name     | : D:\HPCHEM\1\DATA\TVH0430\008F0101.D | Page Number        | : 1         |
| Operator           | : S.W. Tyson                          | Vial Number        | : 8         |
| Instrument         | : TVH                                 | Injection Number   | : 1         |
| Sample Name        | : LCS050195                           | Sequence Line      | : 1         |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BA M.   |
| quired on          | : 30 Apr 95 11:23 PM                  | Analysis Method    | : TVH043 MT |
| ort Created on:    | 03 May 95 05:29 PM                    | Sample Amount      | : 0         |
| Last Recalib on    | : 01 MAY 95 08:09 AM                  | ISTD Amount        | :           |
| Multiplier         | : 1                                   |                    |             |

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(303) 425-6021

TOTAL EXTRACTABLE HYDROCARBONS  
JET FUEL

|               |              |                       |                 |
|---------------|--------------|-----------------------|-----------------|
| Date Sampled  | : 4/17/95    | Client Project Number | : 722450.2602   |
| Date Received | : 4/18/95    | Lab Project Number    | : 95-1240       |
| Date Prepared | : 4/18/95    | Matrix                | : Water         |
| Date Analyzed | : 4/20,21/95 | Method Number         | : 3500/Mod.8015 |

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample #</u> | <u>Surrogate<br/>Recovery</u> | <u>TEH<br/>mg/L</u> | <u>RL<br/>mg/L</u> |
|-------------------------------|----------------------------|-------------------------------|---------------------|--------------------|
| MB041895                      | METHOD BLANK               | 84%                           | U                   | 0.5                |
| X05829                        | MW-6                       | 93%                           | U                   | 0.5                |
| X05830                        | MW-7                       | 89%                           | 0.6                 | 0.5                |
| X05831                        | MW-10                      | 91%                           | U                   | 0.5                |
| X05832                        | MW-11                      | 95%                           | 5.2                 | 0.5                |
| X05834                        | CPT-16                     | 102%                          | 14                  | 0.5                |

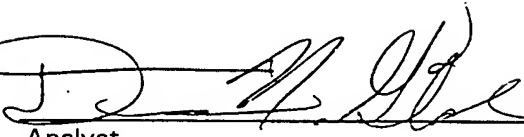
QUALIFIERS

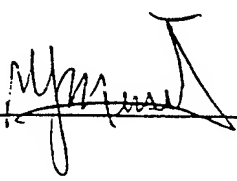
U = TEH analyzed for but not detected.

B = TEH found in blank.

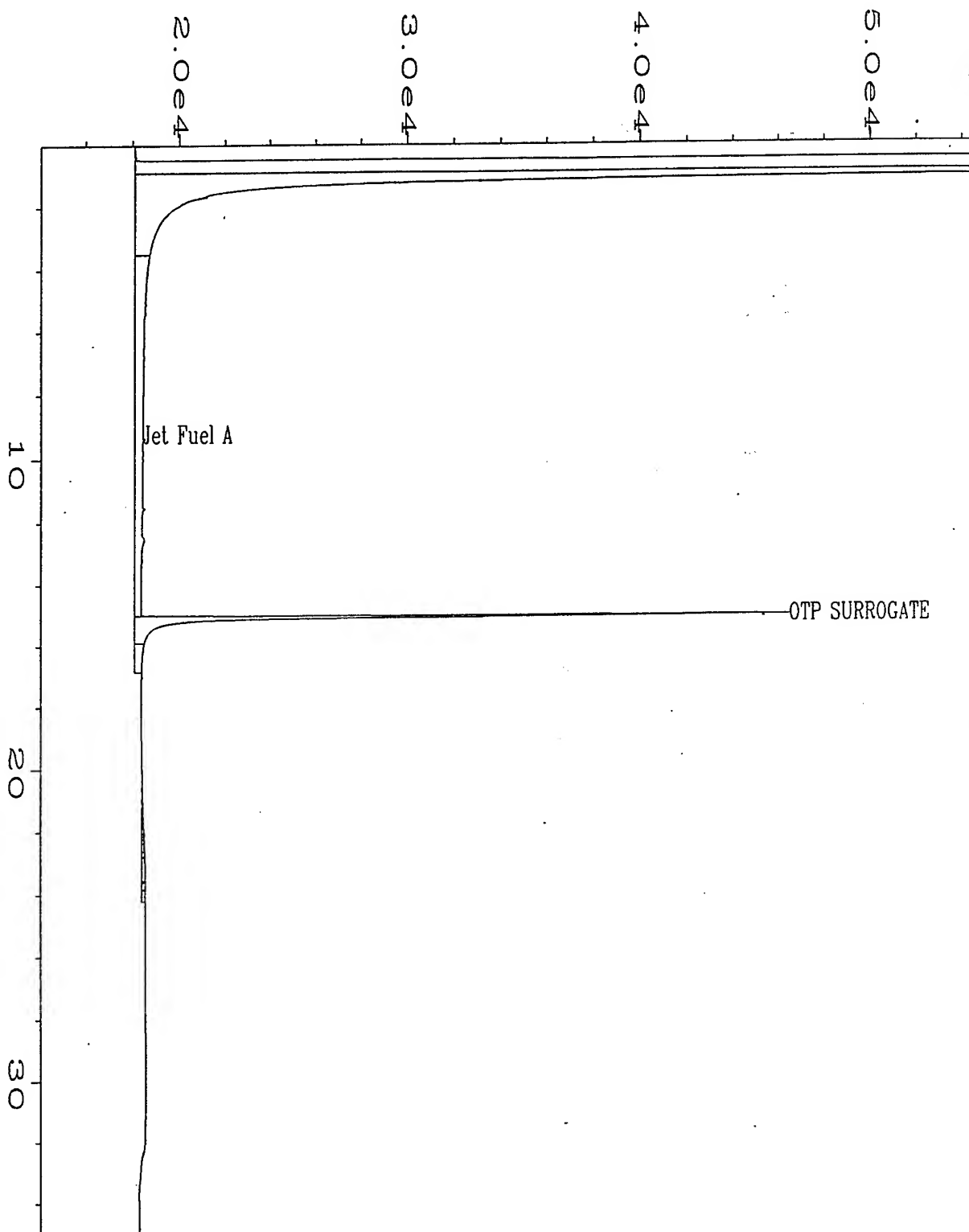
E = Extrapolated value.

RL = Reporting Limit

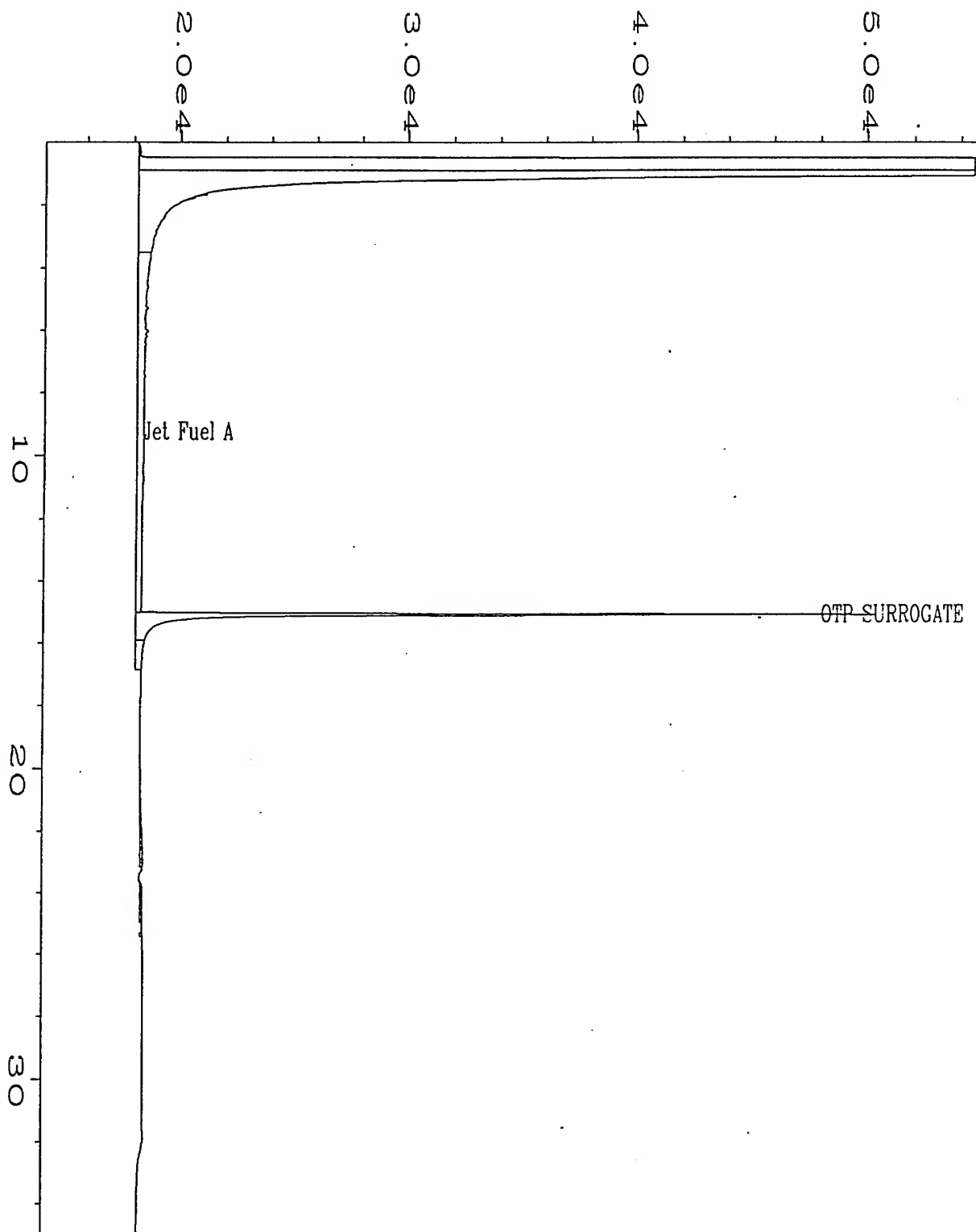
  
Analyst

  
Approved

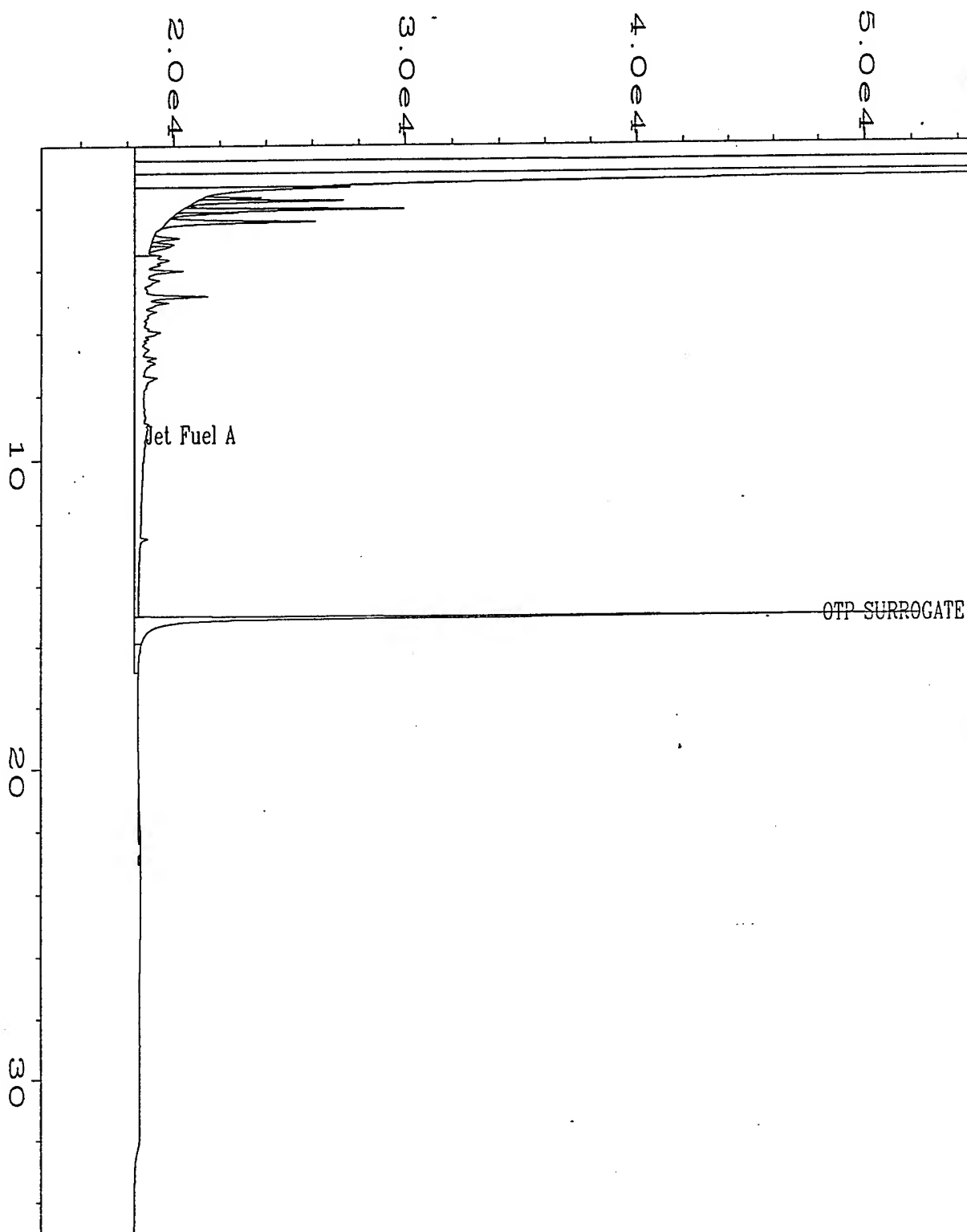
JET1240.XLS



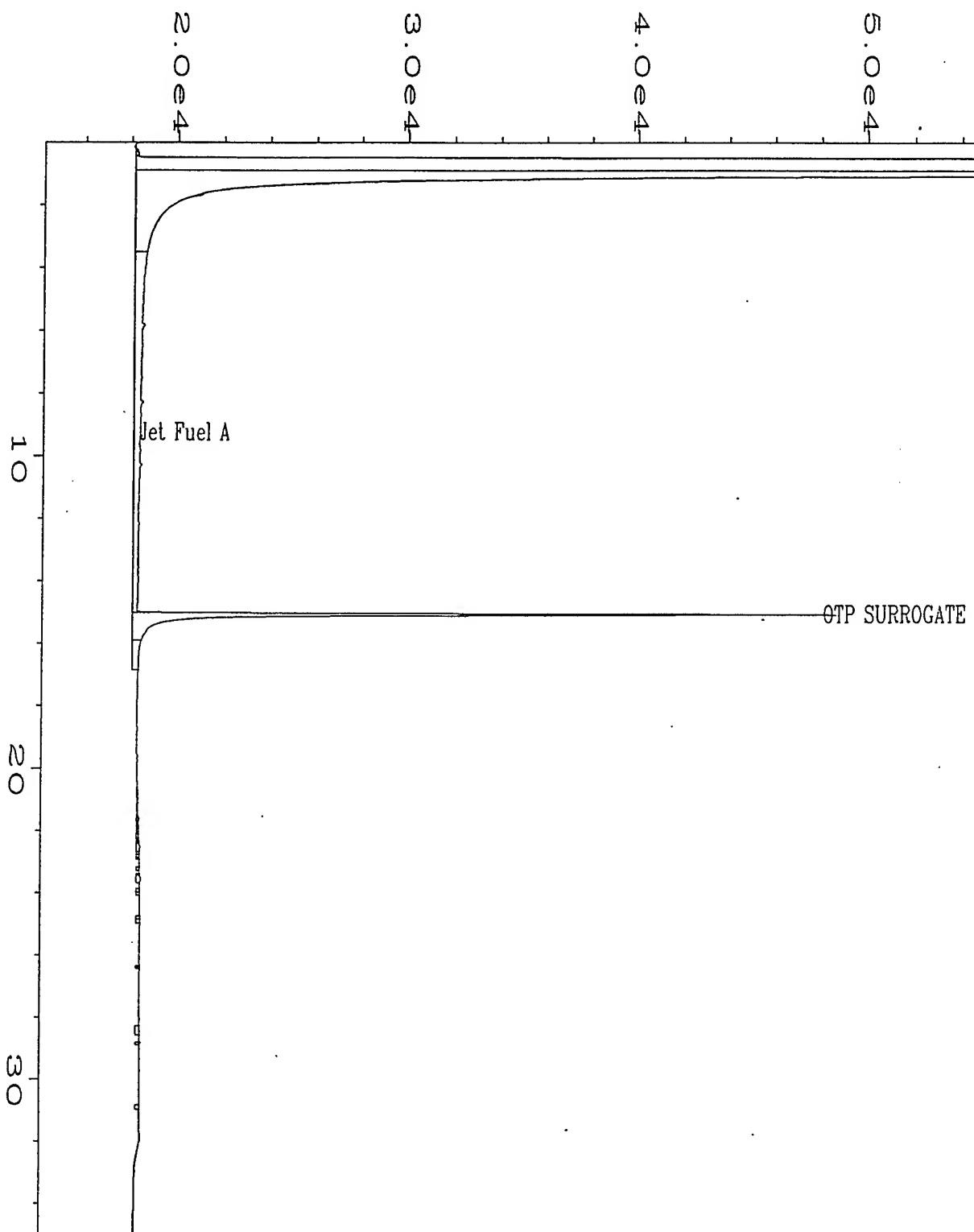
|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\009R0101.D | Page Number       | : 1         |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 9         |
| Instrument         | : TEH                                 | Injection Number  | : 1         |
| Sample Name        | : WB041895                            | Sequence Line     | : 1         |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BA    |
| quired on          | : 20 Apr 95 08:28 PM                  | Analysis Method   | : JET0420.M |
| Report Created on: | : 21 Apr 95 09:32 AM                  | Sample Amount     | : 0         |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |



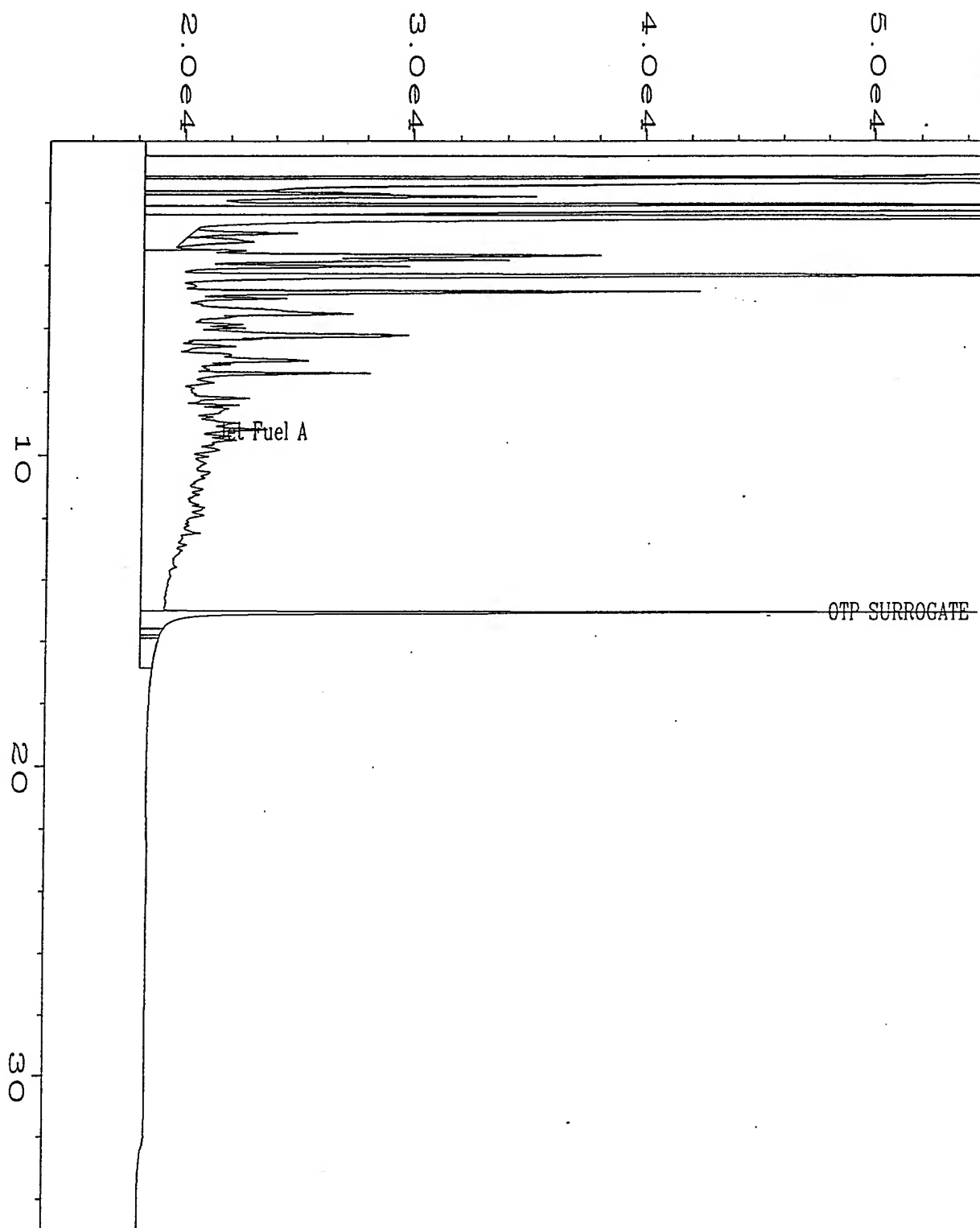
|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\011R0101.D   | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                      | Vial Number       | : 11           |
| Instrument         | : TEH                                   | Injection Number  | : 1            |
| Sample Name        | : X05829 DF=1                           | Sequence Line     | : 1            |
| Run Time Bar Code: |   | Instrument Method | : FID1BASE.MTH |
| Required on        | : 20 Apr 95 10:00 PM                    | Analysis Method   | : JET0420.MTH  |
| Report Created on: | : 21 Apr 95 09:32 AM                    | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                    | ISTD Amount       | :              |
| Multiplier         | : 1                                     |                   |                |
| Sample Info        | : PROJECT # 95-1240 CLIENT # MW-6 WATER |                   |                |



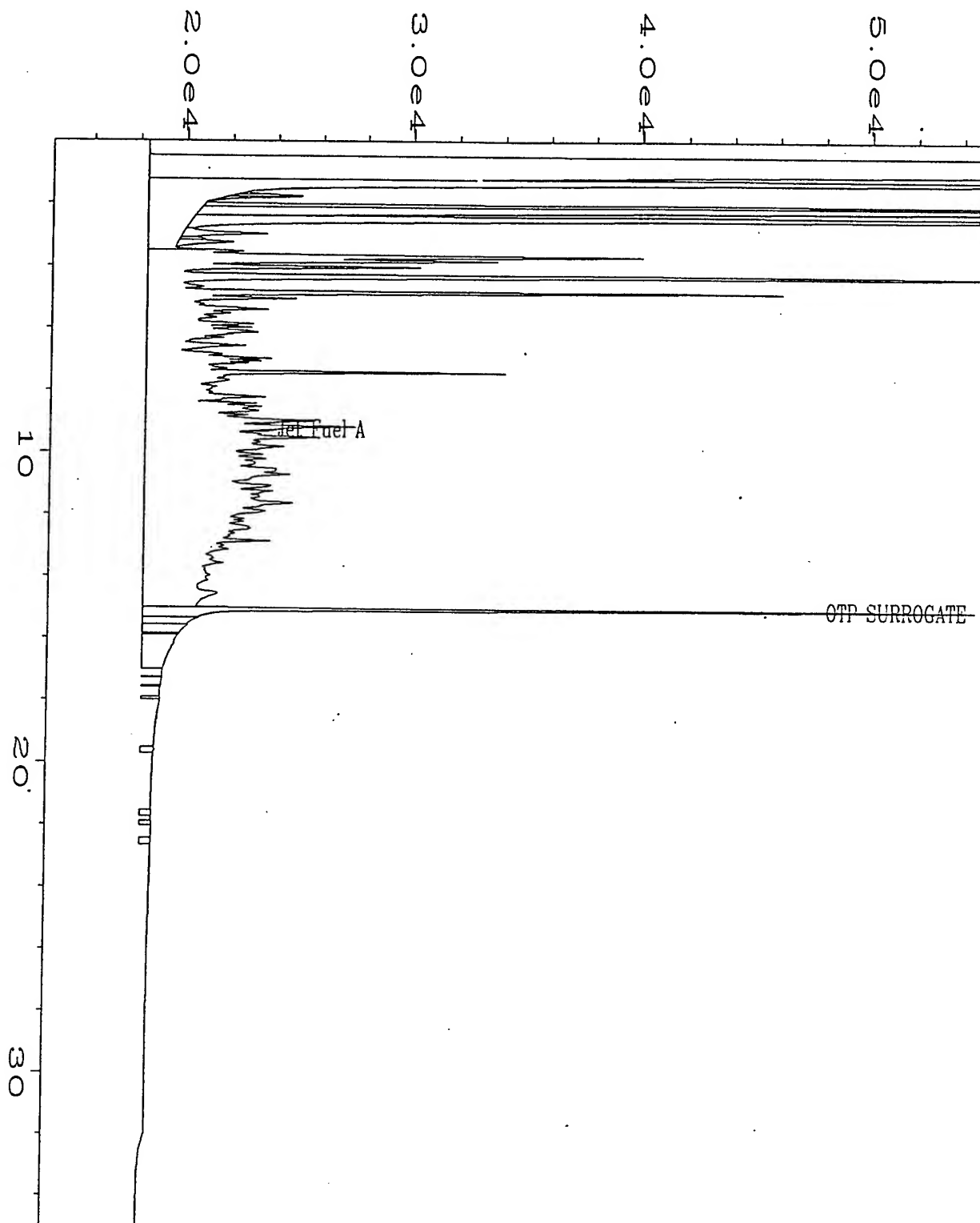
|                    |   |                    |              |
|--------------------|---|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\012R0101.D   | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                      | Vial Number        | : 12         |
| Instrument         | : TEH                                   | Injection Number   | : 1          |
| Sample Name        | : X05830 DF=1                           | Sequence Line      | : 1          |
| Run Time Bar Code: |   | Instrument Method: | FID1BA M     |
| quired on          | : 20 Apr 95 10:47 PM                    | Analysis Method    | : JET0420.MT |
| Report Created on: | 21 Apr 95 09:33 AM                      | Sample Amount      | : 0          |
| Last Recalib on    | : 21 APR 95 09:09 AM                    | ISTD Amount        | :            |
| Multiplier         | : 1                                     |                    |              |
| Sample Info        | : PROJECT # 95-1240 CLIENT # MW-7 WATER |                    |              |



|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\013R0101.D    | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                       | Vial Number       | : 13           |
| Instrument         | : TEH                                    | Injection Number  | : 1            |
| Sample Name        | : X05831 DF=1                            | Sequence Line     | : 1            |
| Run Time Bar Code: |  | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 20 Apr 95 11:33 PM                     | Analysis Method   | : JET0420.MTH  |
| Report Created on  | : 21 Apr 95 09:33 AM                     | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                     | ISTD Amount       | :              |
| Multiplier         | : 1                                      |                   |                |
| Sample Info        | : PROJECT # 95-1240 CLIENT # MW-10 WATER |                   |                |



|                    |  |                   |             |
|--------------------|--|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\014R0101.D    | Page Number       | : 1         |
| Operator           | : Dawn N. Guildner                       | Vial Number       | : 14        |
| Instrument         | : TEH                                    | Injection Number  | : 1         |
| Sample Name        | : X05832 DF=1                            | Sequence Line     | : 1         |
| Run Time Bar Code: |  | Instrument Method | : FID1BA    |
| Acquired on        | : 21 Apr 95 00:19 AM                     | Analysis Method   | : JET0420.M |
| Report Created on  | : 21 Apr 95 09:33 AM                     | Sample Amount     | : 0         |
| Last Recalib on    | : 21 APR 95 09:09 AM                     | ISTD Amount       | :           |
| Multiplier         | : 1                                      |                   |             |
| Sample Info        | : PROJECT # 95-1240 CLIENT # MW-11 WATER |                   |             |



|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\015R0101.D     | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                        | Vial Number       | : 15           |
| Instrument         | : TEH                                     | Injection Number  | : 1            |
| Sample Name        | : X05834 DF=1                             | Sequence Line     | : 1            |
| Run Time Bar Code: |   | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 21 Apr 95 01:06 AM                      | Analysis Method   | : JET0420.MTH  |
| Report Created on: | : 21 Apr 95 09:33 AM                      | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                      | ISTD Amount       | :              |
| Multiplier         | : 1                                       |                   |                |
| Sample Info        | : PROJECT # 95-1240 CLIENT # CPT-16 WATER |                   |                |

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TOTAL EXTRACTABLE HYDROCARBONS (TEH)  
Laboratory Control Sample (LCS)

LCS Number : LCS041895      Matrix : WATER  
Date Prepared : 4/18/95      Method Number : 5030/MOD.8015  
Date Analyzed : 4/20/95  
Sequence Number : JET10

| <u>Compound<br/>Name</u> | <u>Theoretical<br/>Concentration<br/>mg/L</u> | <u>LCS<br/>Concentration<br/>mg/ L</u> | <u>LCS<br/>%<br/>Recovery</u> | <u>QC Limit<br/>% Recovery</u> |
|--------------------------|---|--|-------------------------------|--------------------------------|
| JET FUEL                 | 1000  | 820                                    | 82%                           | 70%-130%                       |

Surrogate Recovery: 79%

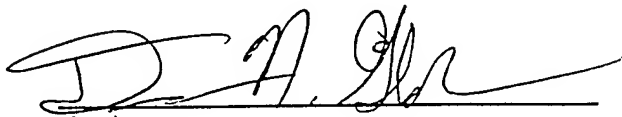
QUALIFIERS

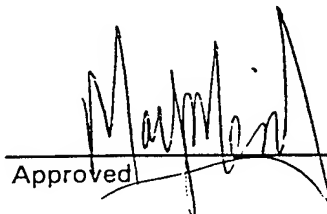
U = TEH analyzed for but not detected.

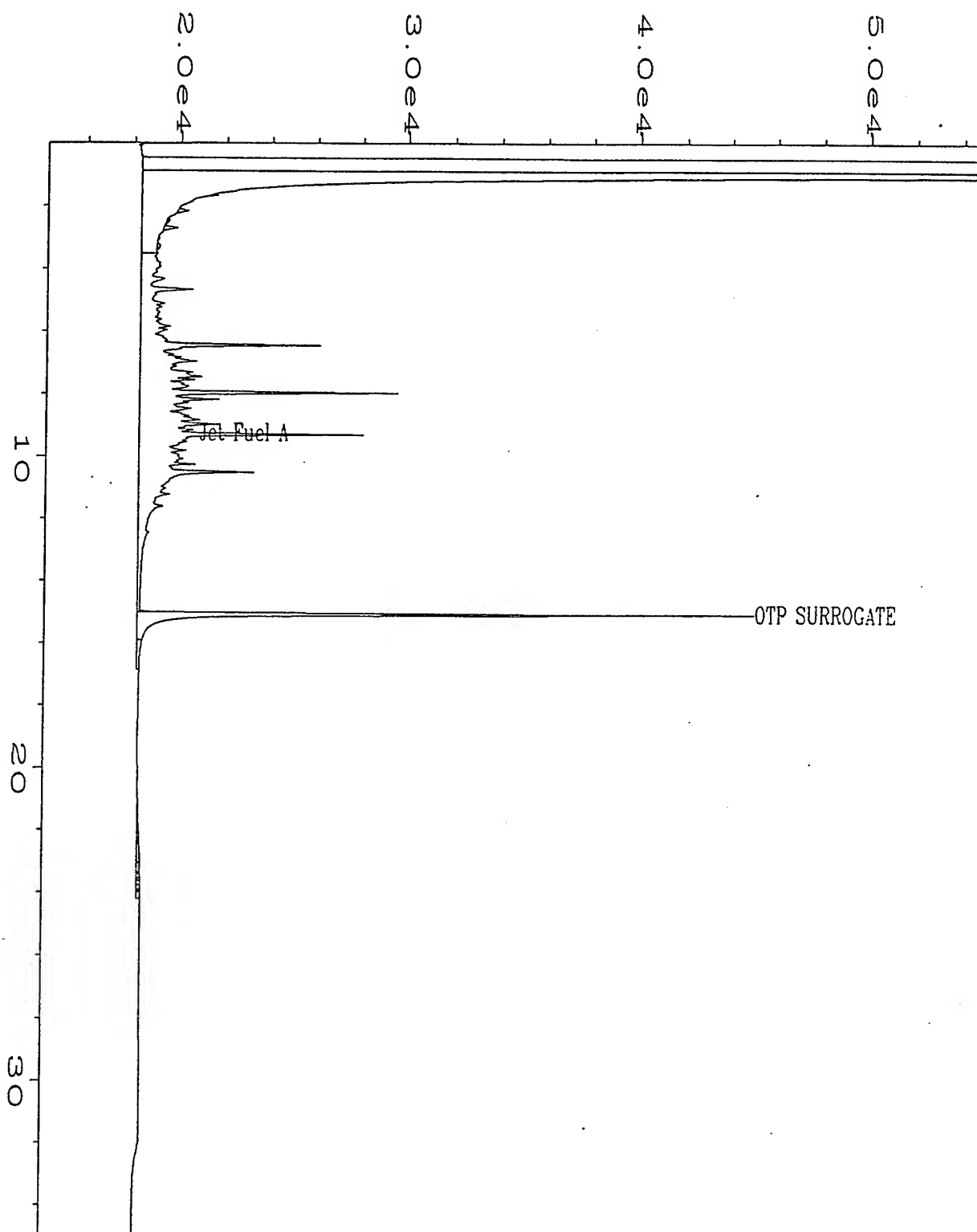
B = TEH found in blank as well as sample (blank data should be compared).

E = Extrapolated value.

NA=Not Available.

  
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Analyst

  
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Approved



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\010R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 10           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : LCS041895                           | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 20 Apr 95 09:14 PM                  | Analysis Method   | : JET0420.MTH  |
| Report Created on  | : 21 Apr 95 09:32 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

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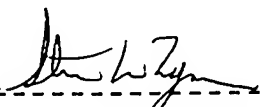
Methane Data Report

|               |            |                     |              |
|---------------|------------|---------------------|--------------|
| Date Sampled  | : 04/17/95 | Client Project No.: | 722450.2602  |
| Date Received | : 04/18/95 | Lab Project No.     | : 95-1240    |
| Date Prepared | : 05/01/95 | Dilution Factor     | : 1.00       |
| Date Analyzed | : 05/01/95 | Method              | : RSKSOP-175 |
|               |            | Matrix              | : Water      |

| Evergreen<br>Sample # | Client<br>Sample # | Matrix | Concentration<br>mg/L | EDL*<br>mg/L |
|-----------------------|--------------------|--------|-----------------------|--------------|
| -----                 | -----              | -----  | -----                 | -----        |
| MB050195              | Method Blank       | Water  | U                     | 0.004        |
| x05829                | MW-6               | Water  | 0.035                 | 0.004        |
| x05830                | MW-7               | Water  | 0.010                 | 0.004        |
| x05831                | MW-10              | Water  | U                     | 0.004        |
| x05832                | MW-11              | Water  | 0.20                  | 0.004        |
| x05834                | CPT-16             | Water  | 0.037                 | 0.004        |

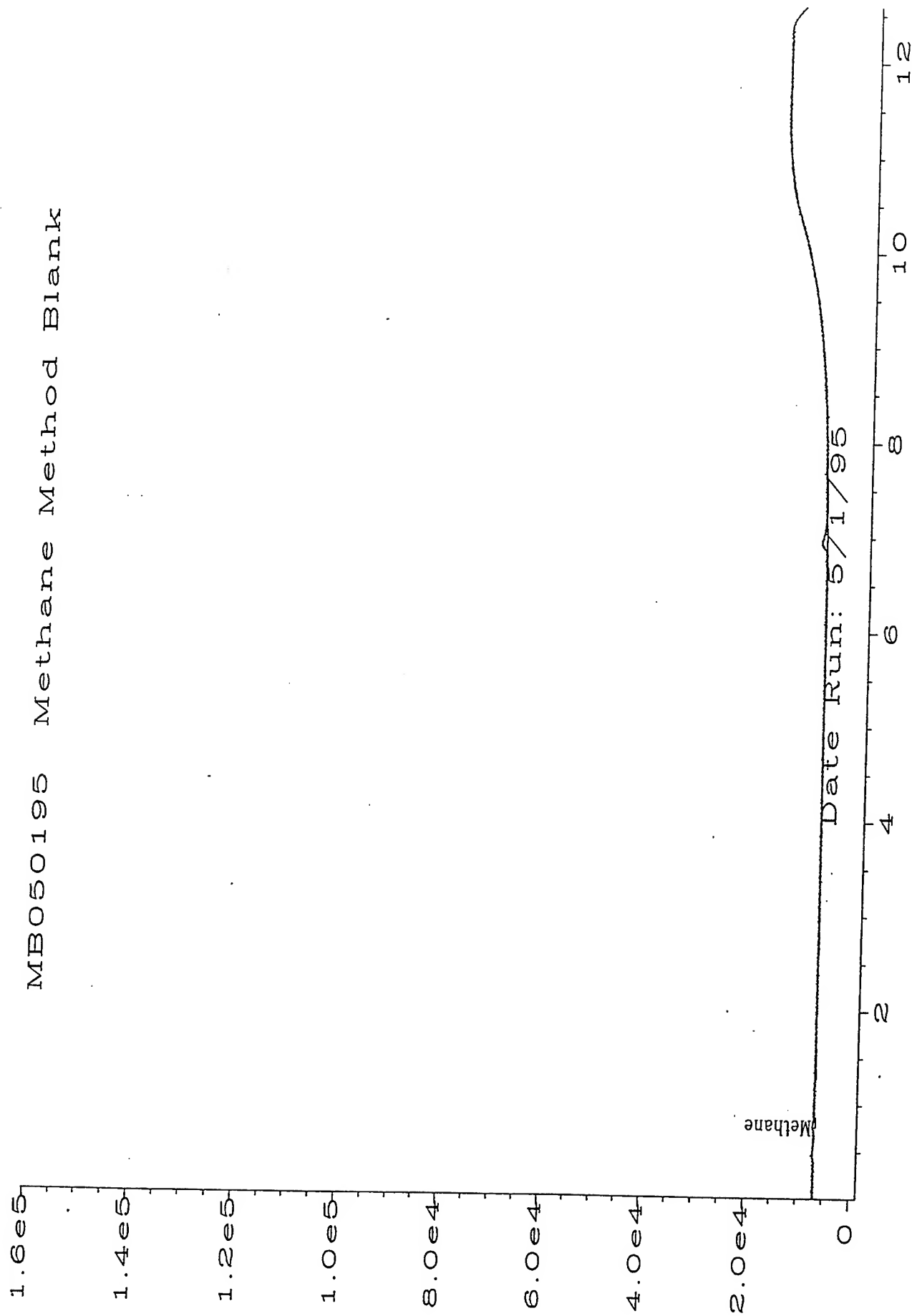
QUALIFIERS:

U = Compound analyzed for, but not detected above the  
Estimated Detection Limit.  
B = Compound also found in the blank, blank data should be  
compared.  
\* = Indicates the Estimated Detection Limit.  
E = Extrapolated value.

  
-----  
Analyst

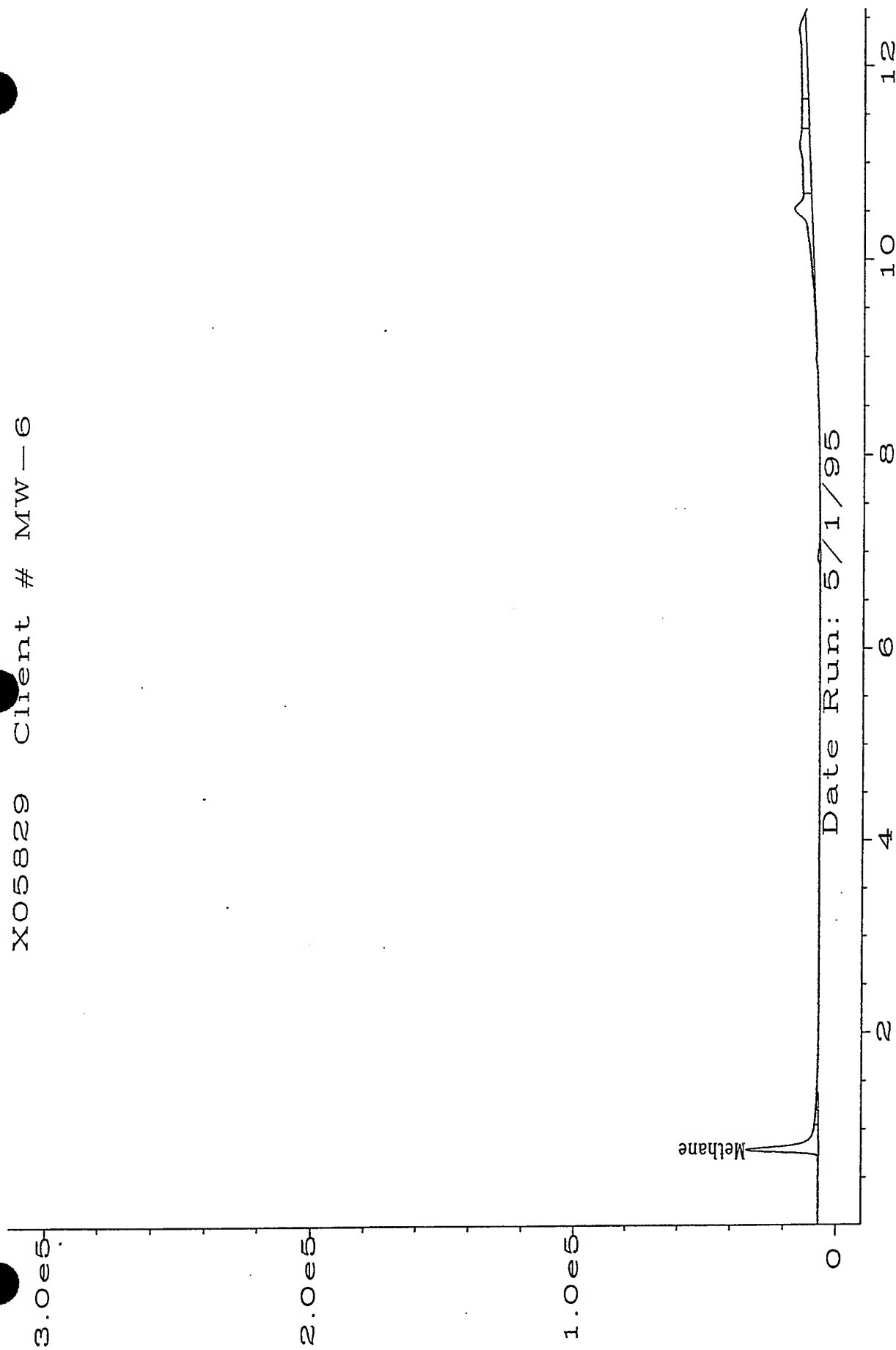
  
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Approved

MB050195 Methane Method Blank



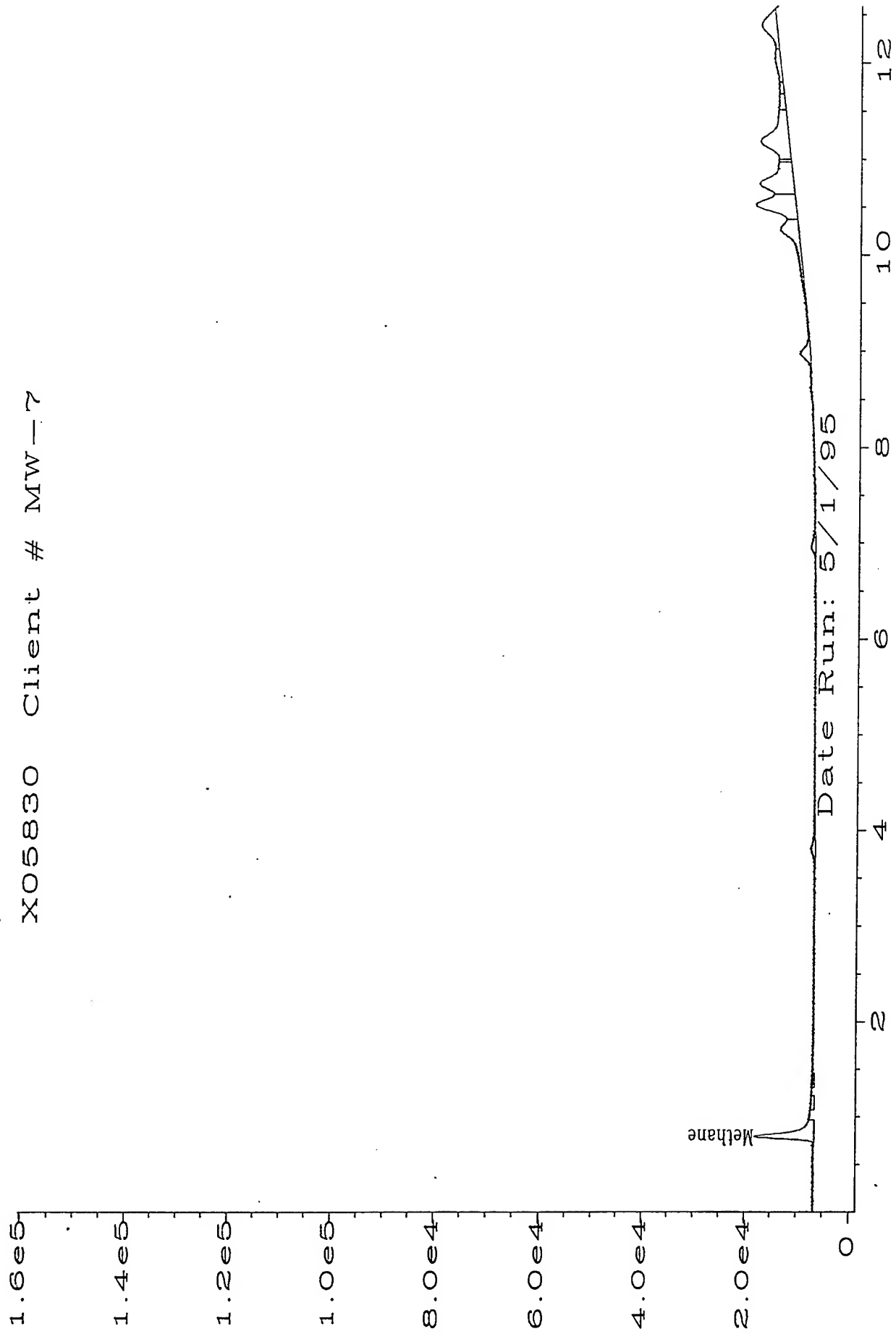
Sig. 2 in C:\HPCHEM\2\DATA\GAS0430\010R0101.D

X05829 Client # MW-6



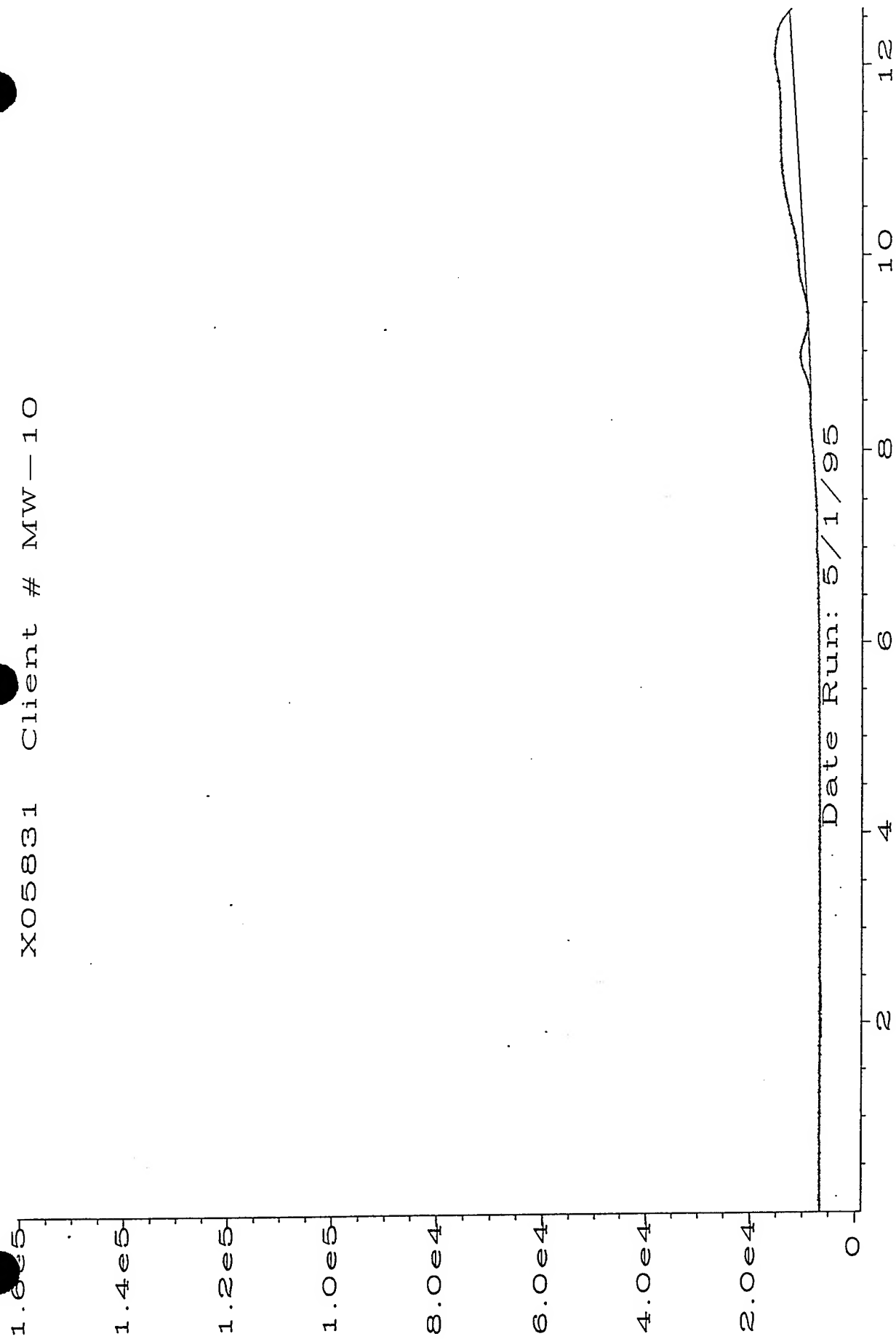
Sig. 2 in C:\HPCHEM\2\DATA\GAS0430\013R0101.D

X05830 Client # MW-7



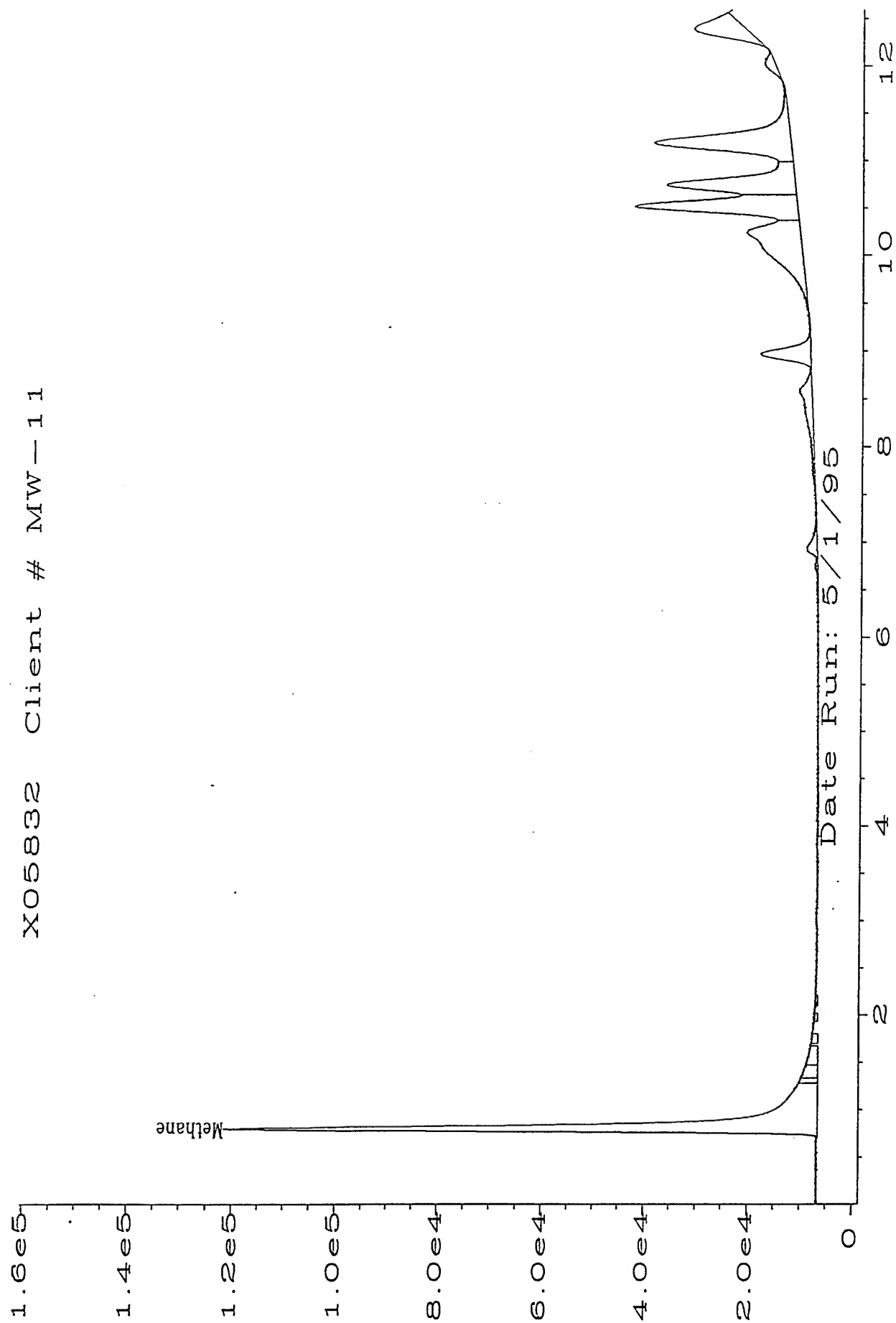
Sig. 2 in C:\HPCHEM\2\DATA\GAS0430\014R0101.D

X05831 Client # MW-10



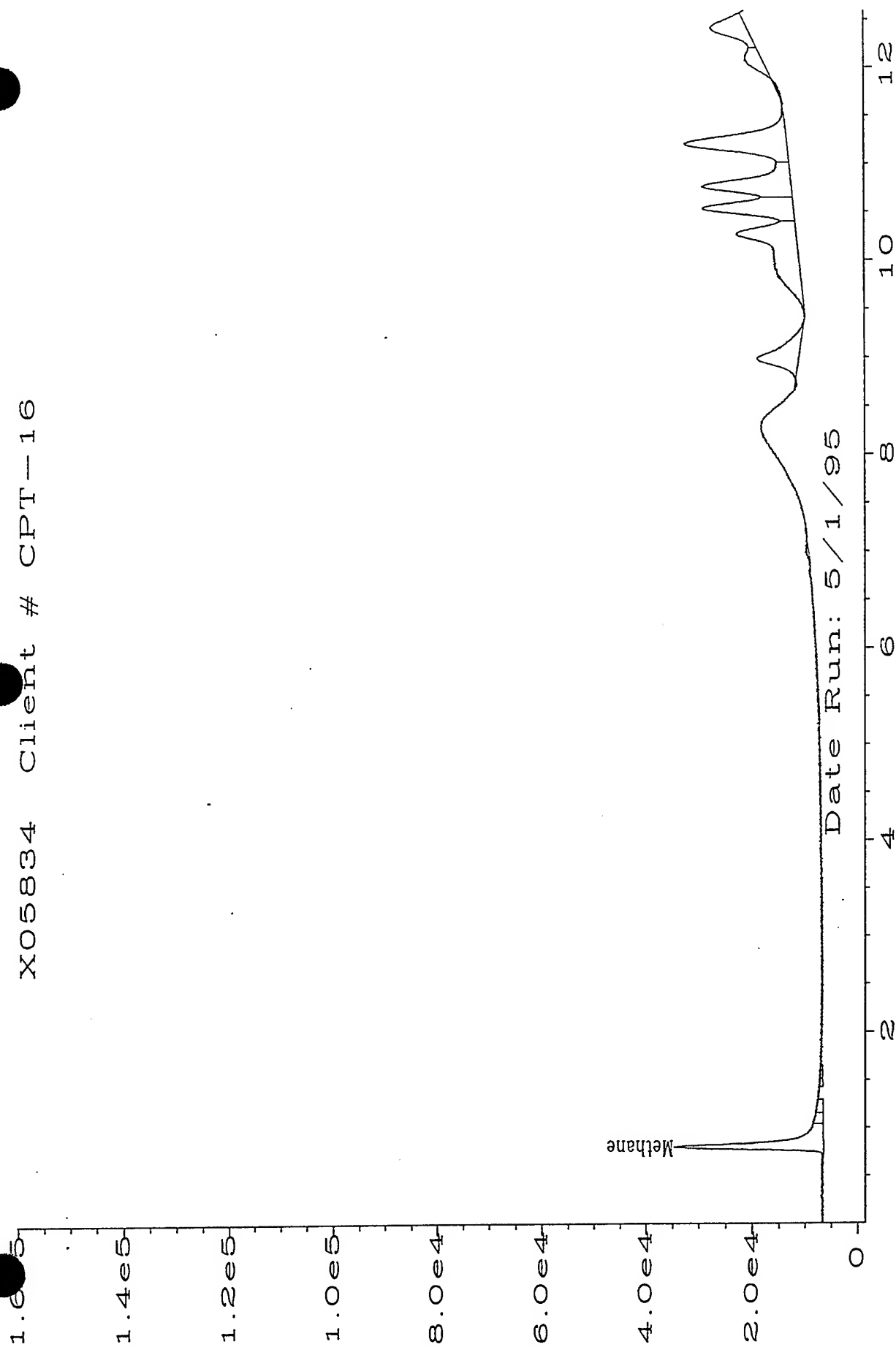
Sig. 2 in C:\HPCHEM\2\DATA\GAS0430\015R0101.D

X05832 Client # MW-11



Sig. 2 in C:\HPCHEM\2\DATA\GAS0430\018R0101.D

X05834 Client # CPT-16



Sig: 2 in C:\HPCHEM\2\DATA\GAS0430\019R0101.D

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(303)425-6021

Miscellaneous Analyses

|                         |  |
|-------------------------|--|
| Date Sampled : 4/17/95  | Client Project ID. : 722450.2602/SJAFB |
| Date Received : 4/18/95 | Lab Project No. : 95-1240              |
| Date Prepared : 4/18/95 | Detection limit : 0.250 mg/L           |
| Date Analyzed : 4/18/95 | Method : EPA 300.0                     |

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Chloride(mg/L)</u> |
|-------------------------------|-----------------------------|---------------|-----------------------|
| X05829                        | MW-6                        | Water         | 13.1                  |
| X05829 Dup                    | MW-6 Dup                    | Water         | 13.2                  |
| X05831                        | MW-10                       | Water         | 4.97                  |
| Method Blank                  | 4/18/95                     |               | <0.250                |

Quality Assurance

|   | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|---|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot # J-I0N01134 | 20.0                         | 18.9                     | 94.5                  |

Delina V. Byers  
Analyst

[Signature]  
Approved

1240JJ.4

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Miscellaneous Analyses

|                         |  |
|-------------------------|--|
| Date Sampled : 4/17/95  | Client Project ID. : 722450.2602/SJAFB |
| Date Received : 4/18/95 | Lab Project No. : 95-1240              |
| Date Prepared : 4/18/95 | Detection limit : 0.076 mg/L           |
| Date Analyzed : 4/18/95 | Method : EPA 300.0                     |

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Nitrite-N(mg/L)</u> |
|-------------------------------|-----------------------------|---------------|------------------------|
| X05829                        | MW-6                        | Water         | <0.076                 |
| X05829 Dup                    | MW-6 Dup                    | Water         | <0.076                 |
| X05830                        | MW-7                        | Water         | <0.076                 |
| X05831                        | MW-10                       | Water         | <0.076                 |
| X05832                        | MW-11                       | Water         | <0.076                 |
| X05834                        | CPT-16                      | Water         | <0.076                 |
| Method Blank                  | 4/18/95                     |               | <0.076                 |

Quality Assurance\*\*

|   | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|---|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot # J-ION01134 | 21.0                         | 19.9                     | 94.8                  |

\*\* = Quality assurance results reported as Nitrite (NO<sub>2</sub>)

Debra V. Byers  
Analyst

[Signature]

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Miscellaneous Analyses

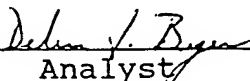
|                         |  |
|-------------------------|--|
| Date Sampled : 4/17/95  | Client Project ID. : 722450.2602/SJAFB |
| Date Received : 4/18/95 | Lab Project No. : 95-1240              |
| Date Prepared : 4/18/95 | Detection limit : 0.056 mg/L           |
| Date Analyzed : 4/18/95 | Method : EPA 300.0                     |


| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Nitrate-N(mg/L)</u> |
|-------------------------------|-----------------------------|---------------|------------------------|
| X05829                        | MW-6                        | Water         | <0.056                 |
| X05829 Dup                    | MW-6 Dup                    | Water         | <0.056                 |
| X05830                        | MW-7                        | Water         | <0.056                 |
| X05831                        | MW-10                       | Water         | 1.17                   |
| X05832                        | MW-11                       | Water         | <0.056                 |
| X05834                        | CPT-16                      | Water         | <0.056                 |
| Method Blank                  | 4/18/95                     |               | <0.056                 |

Quality Assurance\*\*

|   | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|---|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot # J-I0N01134 | 20.0                         | 18.7                     | 93.5                  |

\*\* = Quality assurance results reported as Nitrate (NO<sub>3</sub>)

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
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(303) 425-6021

Miscellaneous Analyses

|                         |  |
|-------------------------|--|
| Date Sampled : 4/17/95  | Client Project ID. : 722450.2602/SJAFB |
| Date Received : 4/18/95 | Lab Project No. : 95-1240              |
| Date Prepared : 4/18/95 | Detection limit : 0.250 mg/L           |
| Date Analyzed : 4/18/95 | Method : EPA 300.0                     |

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Sulfate (mg/L)</u> |
|-------------------------------|-----------------------------|---------------|-----------------------|
| X05829                        | MW-6                        | Water         | 4.46                  |
| X05829 Dup                    | MW-6 Dup                    | Water         | 4.49                  |
| X05830                        | MW-7                        | Water         | 8.47                  |
| X05831                        | MW-10                       | Water         | 7.02                  |
| X05832                        | MW-11                       | Water         | 1.92                  |
| X05834                        | CPT-16                      | Water         | 1.16                  |
| Method Blank                  | 4/18/95                     |               | <0.250                |

Quality Assurance

|   | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|---|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot # J-I0N01134 | 30.0                         | 29.1                     | 97.0                  |

Debra L. Byers  
Analyst

[Signature]  
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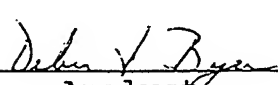
Miscellaneous Analyses

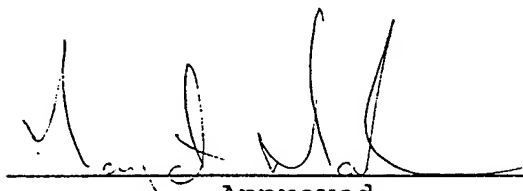
|                         |   |
|-------------------------|---|
| Date Sampled : 4/17/95  | Client Project ID. : 722450.2602/SJ AFB |
| Date Received : 4/18/95 | Lab Project No. : 95-1240               |
| Date Prepared : 4/20/95 | Matrix : 5.00 mgCaCO <sub>3</sub> /L    |
| Date Analyzed : 4/20/95 | Method : EPA 310.1                      |

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Total Alkalinity<br/>(mgCaCO<sub>3</sub>/L)</u> |
|-------------------------------|-----------------------------|---------------|--|
| X05830                        | MW-7                        | Water         | 25.4   |
| X05830 Dup                    | MW-7 Dup                    | Water         | 24.7   |
| X05831                        | MW-10                       | Water         | <5.00  |
| X05832                        | MW-11                       | Water         | 88.1   |
| Method Blank                  | (4/20/95)                   |               | <5.00  |

Quality Assurance

|                                       | <u>True Value<br/>(mgCaCO<sub>3</sub>/L)</u> | <u>Result<br/>(mgCaCO<sub>3</sub>/L)</u> | <u>%<br/>Recovery</u> |
|---------------------------------------|--|--|-----------------------|
| APG Minerals reference<br>Lot # 13862 | 11.8   | 11.5                                     | 97.5                  |

  
\_\_\_\_\_  
Analyst

  
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Approved

1240JJ.4

# Evergreen Analytical Sample Log Sheet

Project # 95-1264

Date(s) Sampled: 4/18/95 COC  
Date Received: 4/19/95 1000

Date Due: 4/24-UST, 5/03-OTHERS  
Holding Time(s): 05/02-VOA, BTEX, ALK.  
4/25-BNA, TVH, TEH.  
4/20-ANIONS

Client Project I.D. 722450.2602/SEYMORE JOHNSON AFB

Rush STANDARD

Client: Parsons Engineering Science, Inc.

Shipping Charges N/A

Address: 1700 Broadway Suite 900

E.A. Cooler # 602

Denver, CO 80290

Airbill # FEDEX-4306784941

Contact: TODD WIEDEMEIER

Custody Seal Intact? N

Client P.O. \_\_\_\_\_

Cooler N/A Bottles N/A

Phone #831-8100 Fax #831-8208

COC Present

Y

Sample Tags Present?

Y

Sample Tags Listed?

Y

Sample(s) Sealed?

Y

Special Invoicing/Billing \_\_\_\_\_

Special Instructions ALL BTEX AND VOA SAMPLES ARE TO INCLUDE CHLOROBENZENE, TMB AND TEMB UNLESS OTHERWISE NOTED. AN MS/MSD AND LAB DUPLICATE IS TO BE ANALYZED ON X05931 BTEX. \*SEE ATTACHED SHEET FOR VOA 624 INSTRUCTIONS.

| Lab ID #      | Client ID#     | Analysis  | Mtx | Btl | Loc |
|---------------|----------------|-----------|-----|-----|-----|
| X05923A/B/C   | CPT-18         | * VOA 624 | W   | 40V | 9   |
| X05926A/B/C   | MW-4           | * VOA 624 | W   | 40V | 9   |
| X05928A/B/C   | MW-12D         | * VOA 624 | W   | 40V | 9   |
| X05931A/B/C   | MW-5           | * VOA 624 | W   | 40V | 9   |
| X05932A/B/C   | MW-8           | * VOA 624 | W   | 40V | 9   |
| X05933A/B/C   | MW-3           | * VOA 624 | W   | 40V | 9   |
| X05926D       | MW-4           | BNA 625   | W   | 80A | D6  |
| X05921A/B     | TRIP BLANK     | BTEX 602  | W   | 40V | 2   |
| X05922A/B     | CPT-17         | BTEX 602  | W   | 40V | 2   |
| X05923D/E     | CPT-18         | BTEX 602  | W   | 40V | 2   |
| X05924A/B     | FIELD BLANK    | BTEX 602  | W   | 40V | 2   |
| X05925A/B     | CPT-19         | BTEX 602  | W   | 40V | 2   |
| X05926E/F     | MW-4           | BTEX 602  | W   | 40V | 2   |
| X05926Q/R     | MW-4 DUPE      | BTEX 602  | W   | 40V | 2   |
| X05928D/E     | MW-12D         | BTEX 602  | W   | 40V | 2   |
| X05929A/B     | TRIP BLANK     | BTEX 602  | W   | 40V | 2   |
| X05931D/E/F/G | MW-5 (+MS/MSD) | BTEX 602  | W   | 40V | 2   |
| X05930A/B     | MW-13          | BTEX 602  | LW  | 40V | 10  |

R=Sample to be returned

Route GC/MS 2 GC 4 Metals 1 Wet Chem 3 SxPrep 3 Acctg 1

SxRec C QA/QC C Sales C File Orig

*Jim 4/24/95*

R=Sample to be returned

| AB<br>ID  | CLIENT<br>ID | ANALYSIS   | MTX | BTL  | LOC |
|-----------|--------------|------------|-----|------|-----|
| X05932D/E | MW-8         | BTEX 602   | W   | 40V  | 2   |
| X05933D/E | MW-3         | BTEX 602   | W   | 40V  | 2   |
| X05922C/D | CPT-17       | TVPH       | W   | 40V  | 2   |
| X05923F/G | CPT-18       | TVPH       | W   | 40V  | 2   |
| X05925C/D | CPT-19       | TVPH       | W   | 40V  | 2   |
| X05926G/H | MW-4         | TVPH       | W   | 40V  | 2   |
| X05926S/T | MW-4 DUPE    | TVPH       | W   | 40V  | 2   |
| X05928F/G | MW-12D       | TVPH       | W   | 40V  | 2   |
| X05931H/I | MW-5         | TVPH       | W   | 40V  | 9   |
| X05932F/G | MW-8         | TVPH       | W   | 40V  | 9   |
| X05933F/G | MW-3         | TVPH       | W   | 40V  | 9   |
| X05922E   | CPT-17       | TEPH JET   | W   | 1LA  | D6  |
| X05923H   | CPT-18       | TEPH JET   | W   | 1LA  | D6  |
| X05925E   | CPT-19       | TEPH JET   | W   | 1LA  | D6  |
| X05926I   | MW-4         | TEPH JET   | W   | 1LA  | D6  |
| X05926U   | MW-4 DUPE    | TEPH JET   | W   | 1LA  | D6  |
| X05928H   | MW-12D       | TEPH JET   | W   | 1LA  | D6  |
| X05931J   | MW-5         | TEPH JET   | W   | 1LA  | D6  |
| X05932H   | MW-8         | TEPH JET   | W   | 1LA  | D6  |
| X05933H   | MW-3         | TEPH JET   | W   | 1LA  | D6  |
| X05923I   | CPT-18       | ALKALINITY | W   | 125P | D6  |
| X05926J   | MW-4         | ALKALINITY | W   | 125P | D6  |
| X05928I   | MW-12D       | ALKALINITY | W   | 125P | D6  |
| X05931K   | MW-5         | ALKALINITY | W   | 125P | D6  |

|               |        |                            |   |      |    |
|---------------|--------|----------------------------|---|------|----|
| 5932I         | MW-8   | ALKALINITY                 | W | 125P | D6 |
| X05922F/G/H/I | CPT-17 | METHANE                    | W | 40V  | 2  |
| X05923J/K/L/M | CPT-18 | METHANE                    | W | 40V  | 2  |
| X05925F/G/H/I | CPT-19 | METHANE                    | W | 40V  | 2  |
| X05926K/L/M/N | MW-4   | METHANE                    | W | 40V  | 2  |
| X05928J/K/L/M | MW-12D | METHANE                    | W | 40V  | 2  |
| X05931L/M/N/O | MW-5   | METHANE                    | W | 40V  | 2  |
| X05932J/K/L/M | MW-8   | METHANE                    | W | 40V  | 2  |
| X05933I/J/K/L | MW-3   | METHANE                    | W | 40V  | 2  |
| X05922J       | CPT-17 | CL-, SO4, NITRATE, NITRITE | W | 125P | D6 |
| X05923N       | CPT-18 | CL-, SO4, NITRATE, NITRITE | W | 125P | D6 |
| X05925J       | CPT-19 | CL-, SO4, NITRATE, NITRITE | W | 125P | D6 |
| X05926O       | MW-4   | CL-, SO4, NITRATE, NITRITE | W | 125P | D6 |
| 5928N         | MW-12D | SO4, NITRATE, NITRITE      | W | 125P | D6 |
| X05931P       | MW-5   | SO4, NITRATE, NITRITE      | W | 125P | D6 |
| X05932N       | MW-8   | SO4, NITRATE, NITRITE      | W | 125P | D6 |
| X05933M       | MW-3   | SO4, NITRATE, NITRITE      | W | 125P | D6 |
| X05926P       | MW-4   | 3010 Pb                    | W | 500P | D6 |
| X05928O       | MW-12D | 3010 Pb                    | W | 500P | D6 |

PROJECT SPECIAL INSTRUCTIONS

95-  
94 1264

Date: 4/20 EAL Contact: Patty Client Contact: Todd W.  
Parsons E.E.

INSTRUCTIONS:

✓ X05923 - extra bottle for alkalinity (not on C.O.C.)  
should be analyzed.

MTBE should not be analyzed w/ BTEX

{ X05923, X05926 - Method 624 should include  
MTBE, EDB, isopropyl ether, chlorobenzene,  
1,2-DCB, 1,3-DCB, 1,4-DCB, dichlorodifluoromethane  
and trichlorofluoromethane.  
X05928, X05931, X05932 & X05933 also.

✓ X05930 - free product. analyze for BTEX only

✓ TVPH labeled as Jet should be gasoline

✓ TEPH labeled as diesel should be Jet

Date & Time Rec'd: 4/19/95 Shipped Via: Fedex 806784941  
(Airbill # if applicable)

Client: Pousons ES

Client Project ID(s): 722450, 2602

EAL Project #(s): 95-1264 EAL Cooler(s): (Y) N

Cooler# client 602

Ice packs (Y) N (Y) N Y N Y N Y N

Temperature °C 3° 3°

- |  | Y             | N             | N/A           |
|--|---------------|---------------|---------------|
| 1. Custody seal(s) present:<br>Seals on cooler intact<br>Seals on bottle intact  | <u>      </u> | <u>✓</u>      | <u>✓</u>      |
| 2. Chain of Custody present:   | <u>✓</u>      | <u>      </u> | <u>      </u> |
| 3. Containers broken or leaking:<br>(Comment on COC if Y)  | <u>      </u> | <u>✓</u>      | <u>      </u> |
| 4. Containers labeled:   | <u>✓</u>      | <u>      </u> | <u>      </u> |
| 5. COC agrees w/ bottles received:<br>(Comment on COC if N)  | <u>✓</u>      | <u>      </u> | <u>      </u> |
| 6. COC agrees w/ labels:<br>(Comment on COC if N)  | <u>✓</u>      | <u>      </u> | <u>      </u> |
| 7. Headspace in VOA vials-waters only<br>(comment on COC if Y)   | <u>      </u> | <u>✓</u>      | <u>time</u>   |
| 8. VOA samples preserved:  | <u>✓</u>      | <u>      </u> | <u>time</u>   |
| 9. pH measured on metals, cyanide or phenolics*:<br>List discrepancies <u>      </u><br>*Non-EAL provided containers only, water samples only. | <u>      </u> | <u>      </u> | <u>✓</u>      |
| 10. Metal samples present:<br>Total <u>      </u> , Dissolved <u>      </u><br>D or PD to be filtered:<br>T,TR,D,PD to be Preserved:           | <u>      </u> | <u>      </u> | <u>✓</u>      |
| 11. Short holding times:<br>Specify parameters <u>      </u>   | <u>      </u> | <u>✓</u>      | <u>      </u> |
| 12. Multi-phase sample(s) present:   | <u>      </u> | <u>✓</u>      | <u>      </u> |
| 13. COC signed w/ date/time:   | <u>✓</u>      | <u>      </u> | <u>      </u> |

Comments: Bottle CPT-18 for alkalinity not on C.O.C. Free product sample is not assigned an analysis.

(Additional comments on back)

Custodian Signature/Date: Lee Connor 4/19/95



COMPANY Parsons ES

ADDRESS 461 Harris - Oaks Blvd

CITY Cary STATE NC ZIP 27513

PHONE#(919) 677-0080

**Sampler Name:**

(signature)

(print) YACIAGIKIZAKI

Evergreen Analytical Cooler No. 638

Cooler Received

Please PRINT

**all information:**

CLIENT  
SAMPLE

| SAMPLE IDENTIFICATION | DATE SAMPLED | TIME |
|-----------------------|--------------|------|
|-----------------------|--------------|------|

|      |      |
|------|------|
| 1738 | 1738 |
|------|------|

[illegible]

|          |           |
|----------|-----------|
| 17/10/99 | 2006/1/11 |
|----------|-----------|

|       |         |      |
|-------|---------|------|
| W. 13 | 9/13/95 | 1593 |
|-------|---------|------|

|      |         |      |
|------|---------|------|
| 1400 | 5/18/95 | 1400 |
|------|---------|------|

mw-88 4/18/95 15200

15.1 - 2 11/15/95 1050

[illegible][illegible][illegible][illegible]

T:

Instructions: For Free Product sample - analysis to be client-minimized

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

Date/Time:

Witnessed by: (Signature)

Date/Time

Received by: (Signature)

Date/Time

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report  
Method Blank Report

Method Blank Number : MB042195  
Date Prepared : 4/21/95  
Date Analyzed : 4/21/95


Client Project No. : 722450.26020  
Lab Project No. : 95-1264  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042110

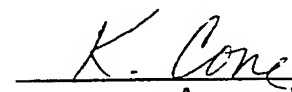
| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 100%                         | 70%-130% (QC limits) |

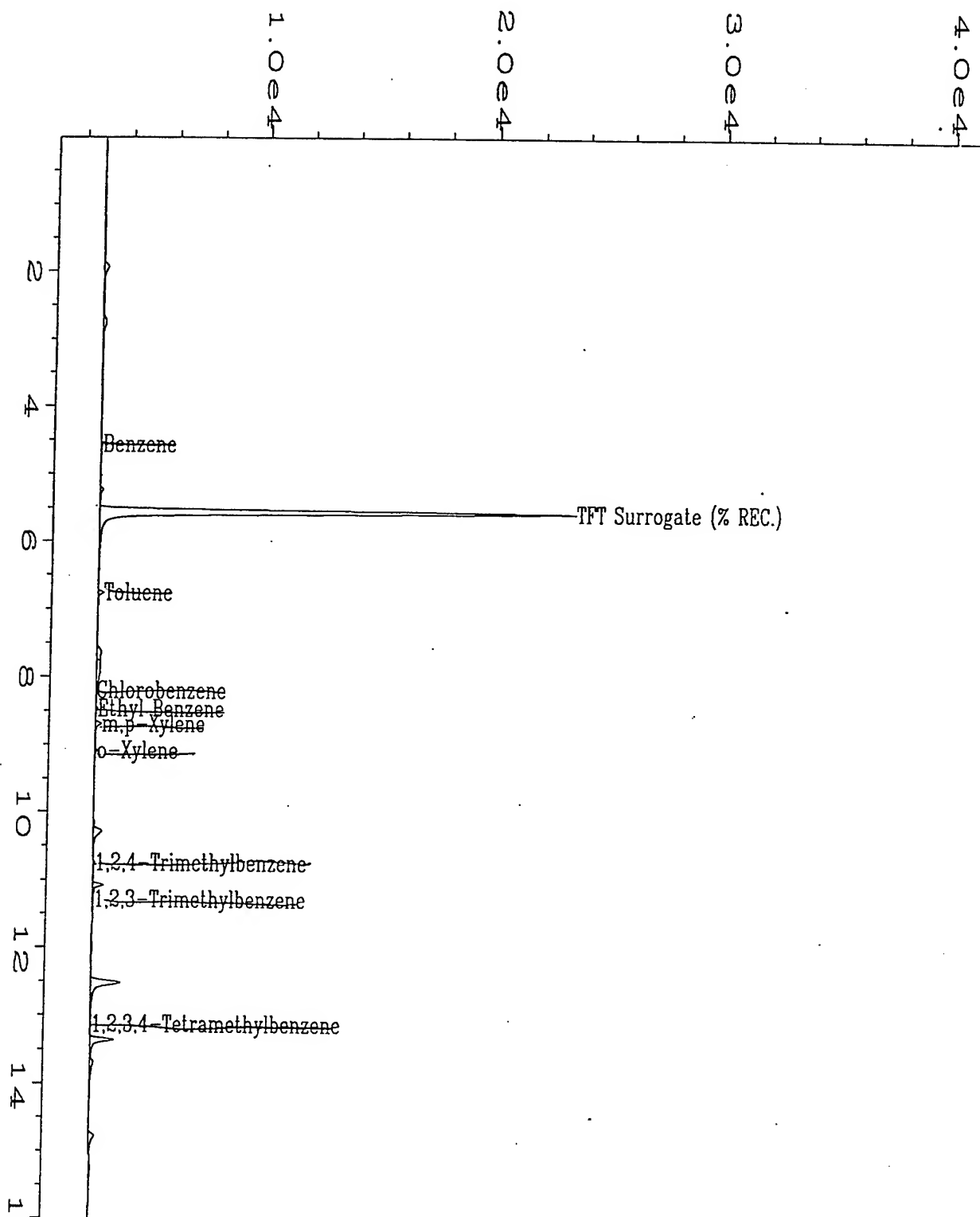
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



user modified

|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\010R0101.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 10          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : MB042195                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MTH |
| Acquired on        | : 21 Apr 95 03:07 PM                  | Analysis Method   | : BX20421.MTH |
| Test Created on    | : 21 Apr 95 03:29 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report  
Method Blank Report

Method Blank Number : MB042495  
Date Prepared : 4/24/95  
Date Analyzed : 4/25/95

Client Project No. : 722450.26020  
Lab Project No. : 95-1264  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042410

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 0.7                          | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 0.4                          | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | NA                           | NA                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 81%                          | 70%-130% (QC limits) |

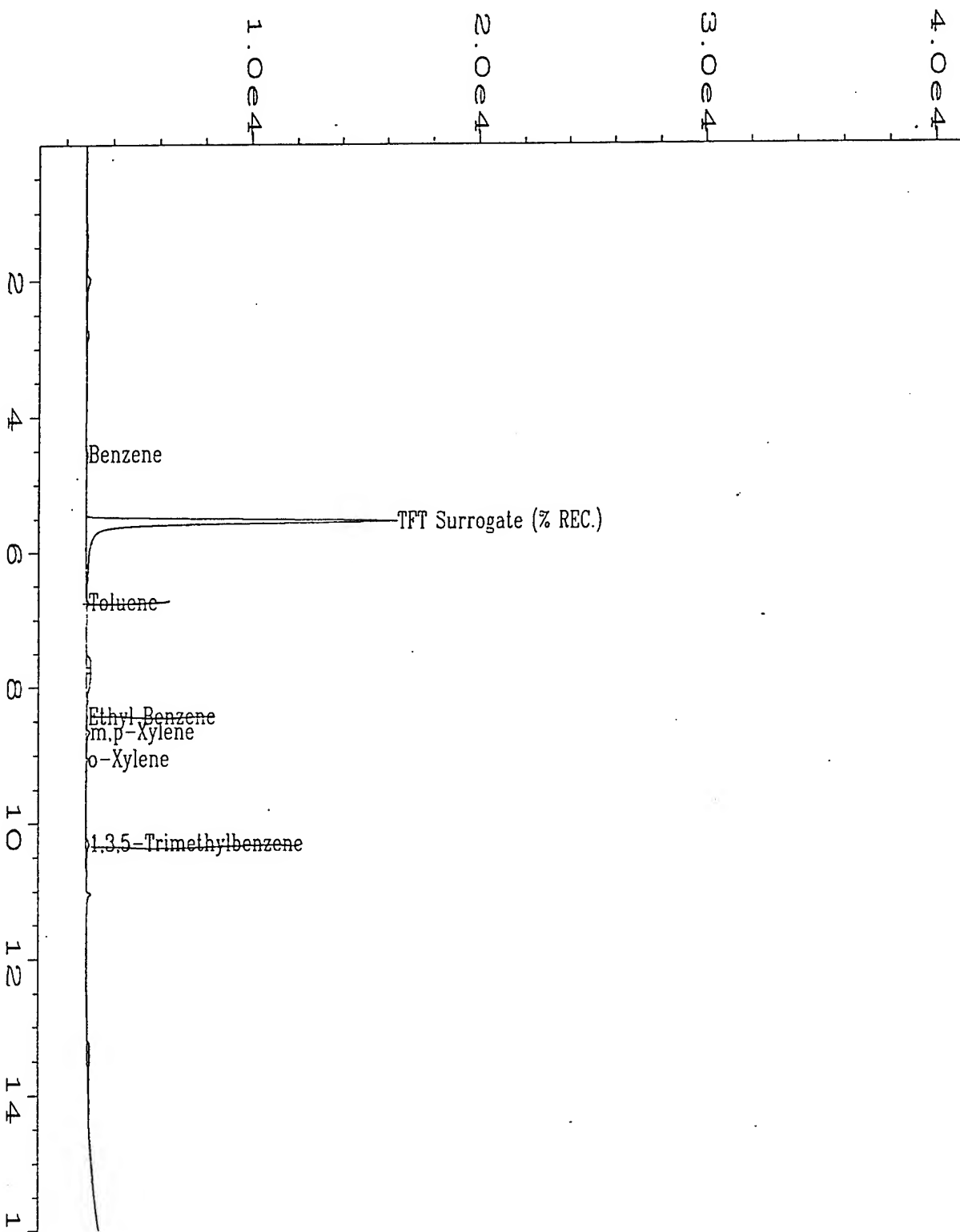
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

K. Cone  
Analyst

AmCella  
Approved



user modified

|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\010R0901.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 10          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : MB042495                            | Sequence Line      | : 9           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20424.MTH   |
| Acquired on        | : 25 Apr 95 01:45 AM                  | Analysis Method    | : BX20424.MTH |
| Report Created on: | 25 Apr 95 11:04 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 25 Apr 95 10:43 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report  
Method Blank Report

Method Blank Number : MB042595  
Date Prepared : 4/25/95  
Date Analyzed : 4/25/95

Client Project No. : 722450.26020  
Lab Project No. : 95-1264  
Dilution Factor : 1.00  
Method : 602/8020  
Matrix : Water  
Lab File No. : BX2042511

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 0.5                             | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 1.0                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 93%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

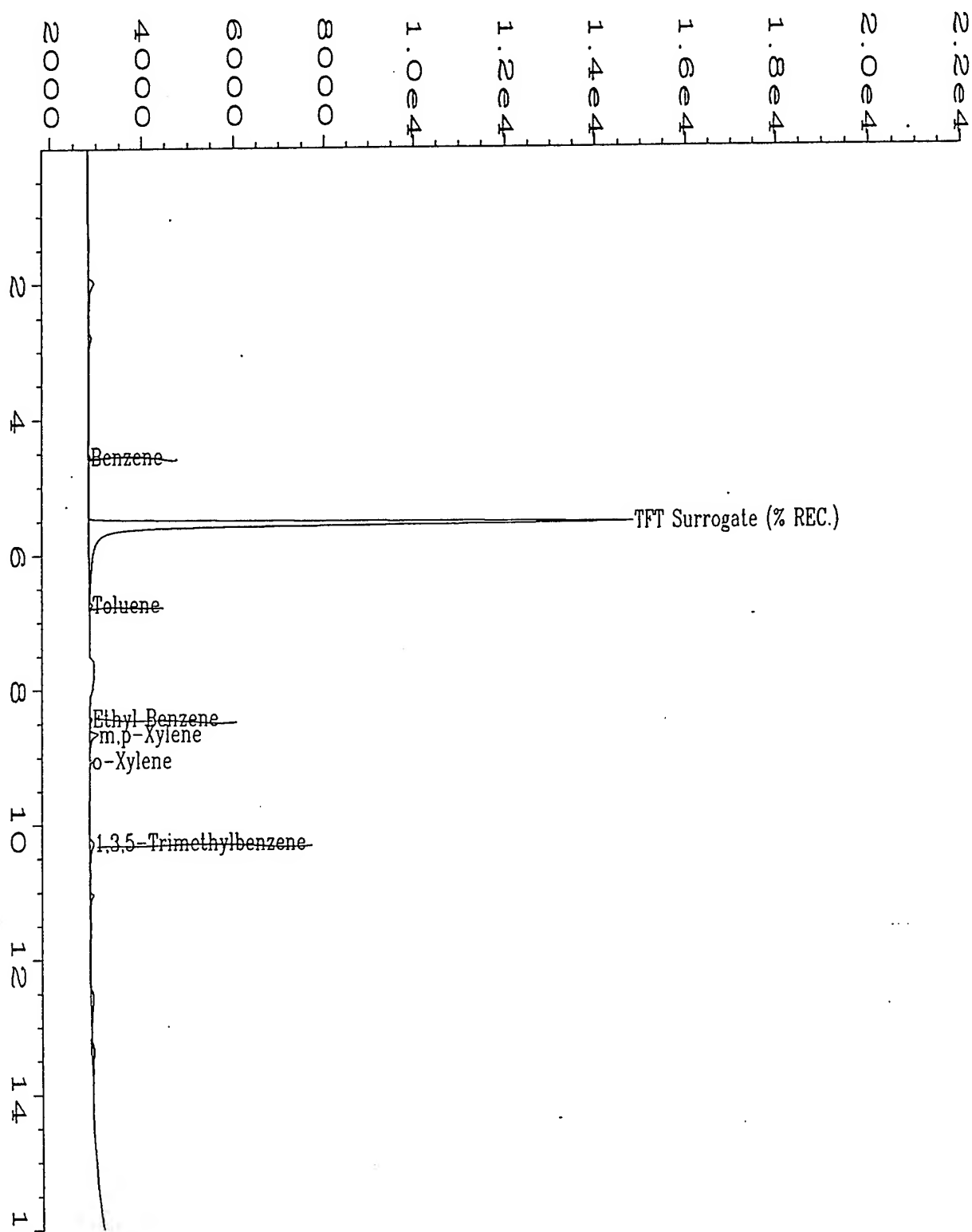
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*A. McClellan*

Approved



user modified

Data File Name : D:\2\DATA\BX20425\011R0101.D  
 Operator : S.W. Tyson  
 Instrument : BTEX2  
 Sample Name : MB042595  
 Run Time Bar Code:  
 Acquired on : 25 Apr 95 03:02 PM  
 Report Created on: 01 May 95 02:46 PM  
 Last Recalib on : 26 APR 95 09:49 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 11  
 Injection Number : 1  
 Sequence Line : 1  
 Instrument Method: BX20425.MTH  
 Analysis Method : BX20425.MTH  
 Sample Amount : 0  
 ISTD Amount :

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report  
Method Blank Report

|                         |              |                    |                                   |
|-------------------------|--------------|--------------------|-----------------------------------|
| Method Blank Number     | : MEB2050295 | Client Project No. | : 722450.2602/Seymour Johnson AFB |
| Date Extracted/Prepared | : 5/2/95     | Lab Project No.    | : 95-1264                         |
| Date Analyzed           | : 5/2/95     | Dilution Factor    | : 1.00                            |
| % Moisture              | : NA         | Method             | : 602/8020                        |
|                         |              | Matrix             | : Water                           |
|                         |              | Lab File No.       | : BX2050214                       |

| Compound Name               | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L |
|-----------------------------|-----------------------------------|------------------------------|------------|
| Benzene                     | 71-43-2                           | U                            | 0.4        |
| Toluene                     | 108-88-3                          | U                            | 0.4        |
| Chlorobenzene               | 108-90-7                          | U                            | 0.4        |
| Ethyl Benzene               | 100-41-4                          | U                            | 0.4        |
| Total Xylenes<br>(m, p & o) | 108-38-3, 106-42-3<br>and 95-47-6 | 0.5                          | 0.4        |
| 3,5-Trimethylbenzene        | 108-67-8                          | U                            | 0.4        |
| 1,2,4-Trimethylbenzene      | 95-63-6                           | U                            | 0.4        |
| 1,2,3-Trimethylbenzene      | 526-73-8                          | U                            | 0.4        |
| 1,2,3,4-Tetramethylbenzene  | 488-23-3                          | U                            | 0.4        |

|   |      |                      |
|---|------|----------------------|
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): | 101% | 70%-130% (QC limits) |
|---|------|----------------------|

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

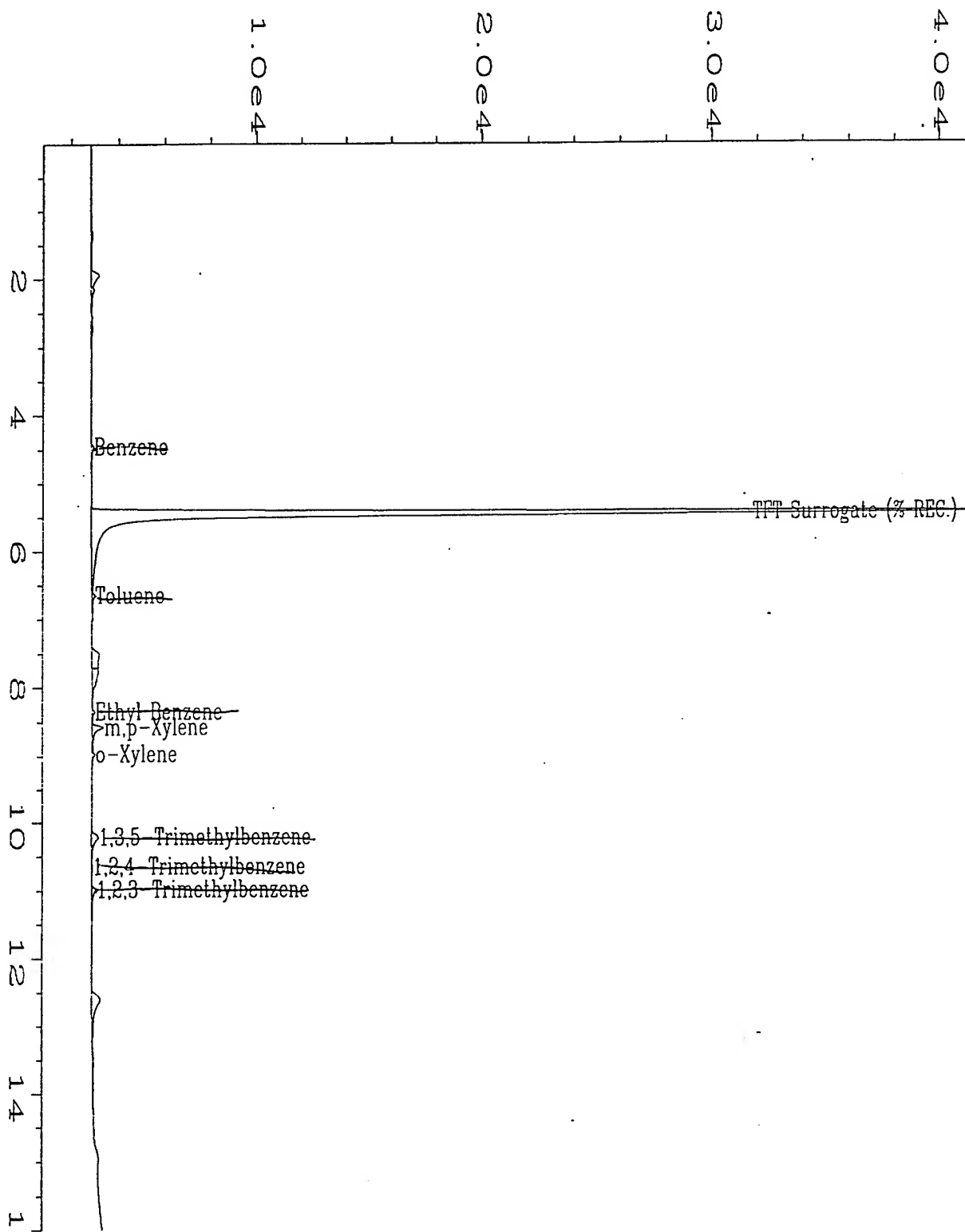
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

NA = Not Available/Not Applicable.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20502\014R1001.D | Page Number       | : 1            |
| Operator           | : C.J. Cook                           | Vial Number       | : 14           |
| Instrument         | : BTEX2                               | Injection Number  | : 1            |
| Sample Name        | : MEB2050295                          | Sequence Line     | : 10           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20502.MTH  |
| Printed on         | : 02 May 95 06:19 PM                  | Analysis Method   | : BX20502A.MTH |
| Report Created on: | : 03 May 95 02:56 PM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 03 MAY 95 02:37 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

*pm 5/12/95*

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |              |                    |                |
|----------------------|--------------|--------------------|----------------|
| Client Sample Number | : Trip Blank | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05921     | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95    | Dilution Factor    | : 1.00         |
| Date Received        | : 4/19/95    | Method             | : 602          |
| Date Prepared        | : 4/21/95    | Matrix             | : Water        |
| Date Analyzed        | : 4/21/95    | Lab File No.       | : BX2042116    |
|                      |              | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 101%                            | 70%-130% (QC limits) |

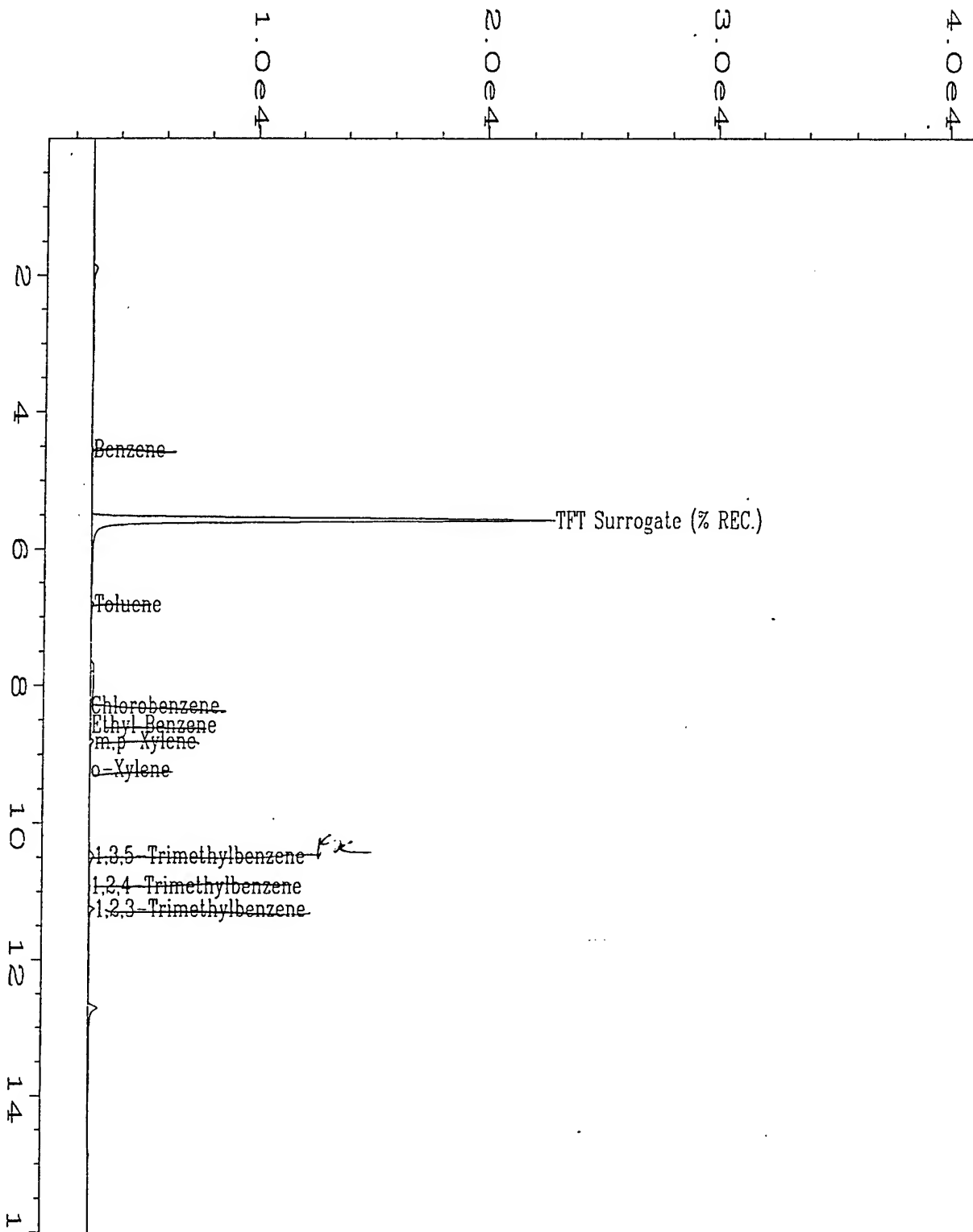
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\016R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 16          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05921;1;5                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Acquired on        | : 21 Apr 95 06:54 PM                  | Analysis Method    | : BX20421.MTH |
| Port Created on:   | 21 Apr 95 07:10 PM                    | Sample Amount      | : 0           |
| Recalib on         | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-1264; TRIP BLANK; 5 ML WATER     |                    |               |

pm 5/12/95

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

Client Sample Number : CPT-17  
Lab Sample Number : X05922  
Date Sampled : 4/18/95  
Date Received : 4/19/95  
Date Prepared : 4/24/95  
Date Analyzed : 4/25/95

Client Project No. : 722450.26020  
Lab Project No. : 95-1264  
Dilution Factor : 20.00  
Method : 602  
Matrix : Water  
Lab File No. : BX2042416  
Method Blank No. : MB042495

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 61 B                         | 8.0                  |
| Toluene   | 108-88-3                          | 18                           | 8.0                  |
| Chlorobenzene   | 108-90-7                          | U                            | 8.0                  |
| Ethyl Benzene   | 100-41-4                          | 88                           | 8.0                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 260 B                        | 8.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 8.0                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 53                           | 8.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 15                           | 8.0                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 74%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See DF=50, BX2042127.

QUALIFIERS:

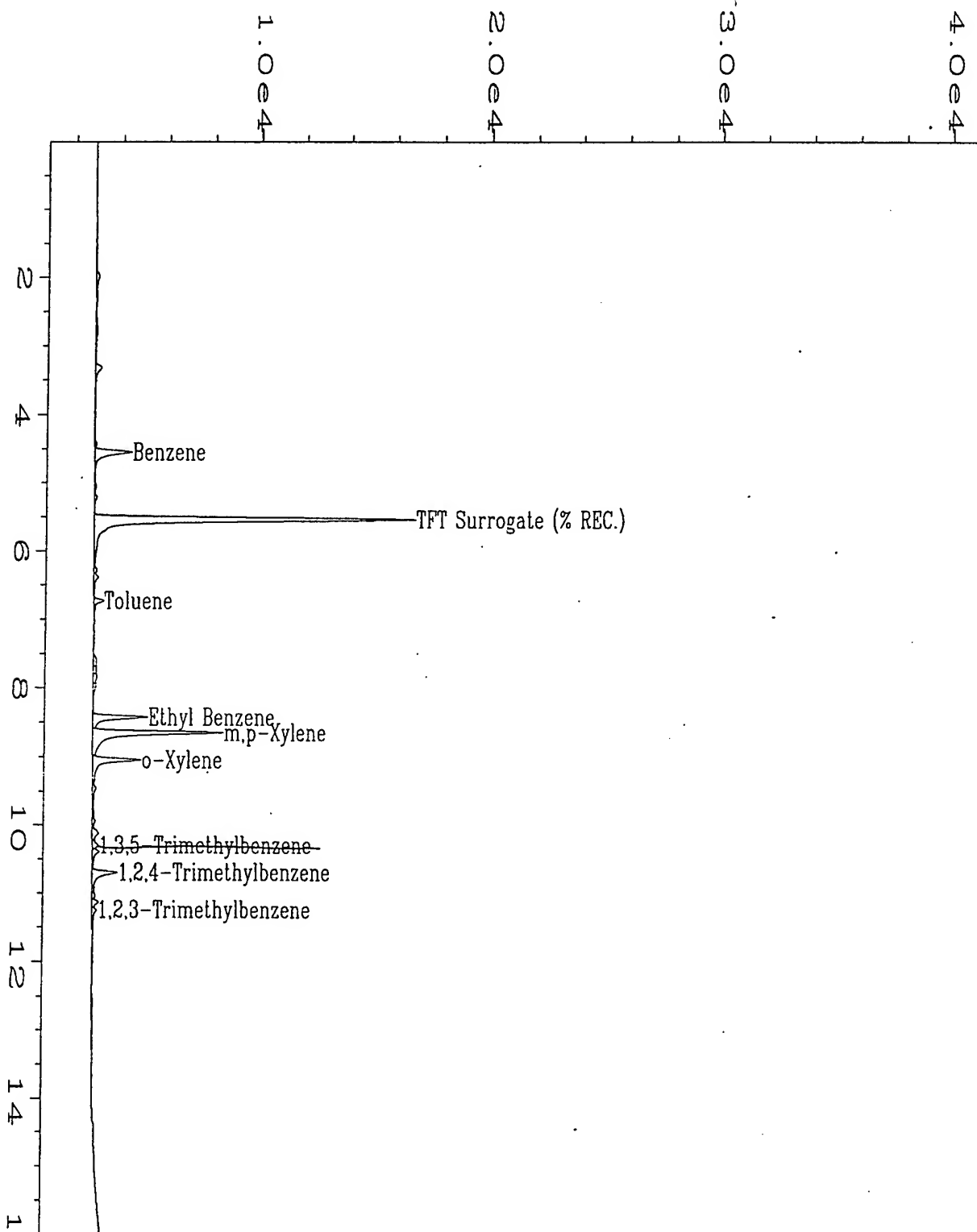
E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*A. McClellan*

Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\016R0901.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 16          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05922;20;0.250                     | Sequence Line     | : 9           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20424.MTH |
| Acquired on        | : 25 Apr 95 05:39 AM                  | Analysis Method   | : BX20424.MTH |
| Port Created on    | : 25 Apr 95 11:15 AM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 25 APR 95 10:43 AM                  | ISTD Amount       | :             |
| Multiplier         | : 20                                  |                   |               |
| Sample Info        | : Project#: 95-1264                   | Client#:          | CPT-17        |
|                    |                                       |                   | WATER         |

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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |           |                    |                |
|----------------------|-----------|--------------------|----------------|
| Client Sample Number | : CPT-17  | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05922  | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95 | Dilution Factor    | : 50.00        |
| Date Received        | : 4/19/95 | Method             | : 602          |
| Date Prepared        | : 2/21/95 | Matrix             | : Water        |
| Date Analyzed        | : 2/22/95 | Lab File No.       | : BX2042127    |
|                      |           | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                           | **                   |
| Toluene   | 108-88-3                          | **                           | **                   |
| Chlorobenzene   | 108-90-7                          | **                           | **                   |
| Ethyl Benzene   | 100-41-4                          | **                           | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | **                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                           | **                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                           | **                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                           | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 28                           | 20                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 94%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See DF=20, BX2042416.

QUALIFIERS:

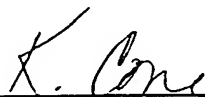
E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

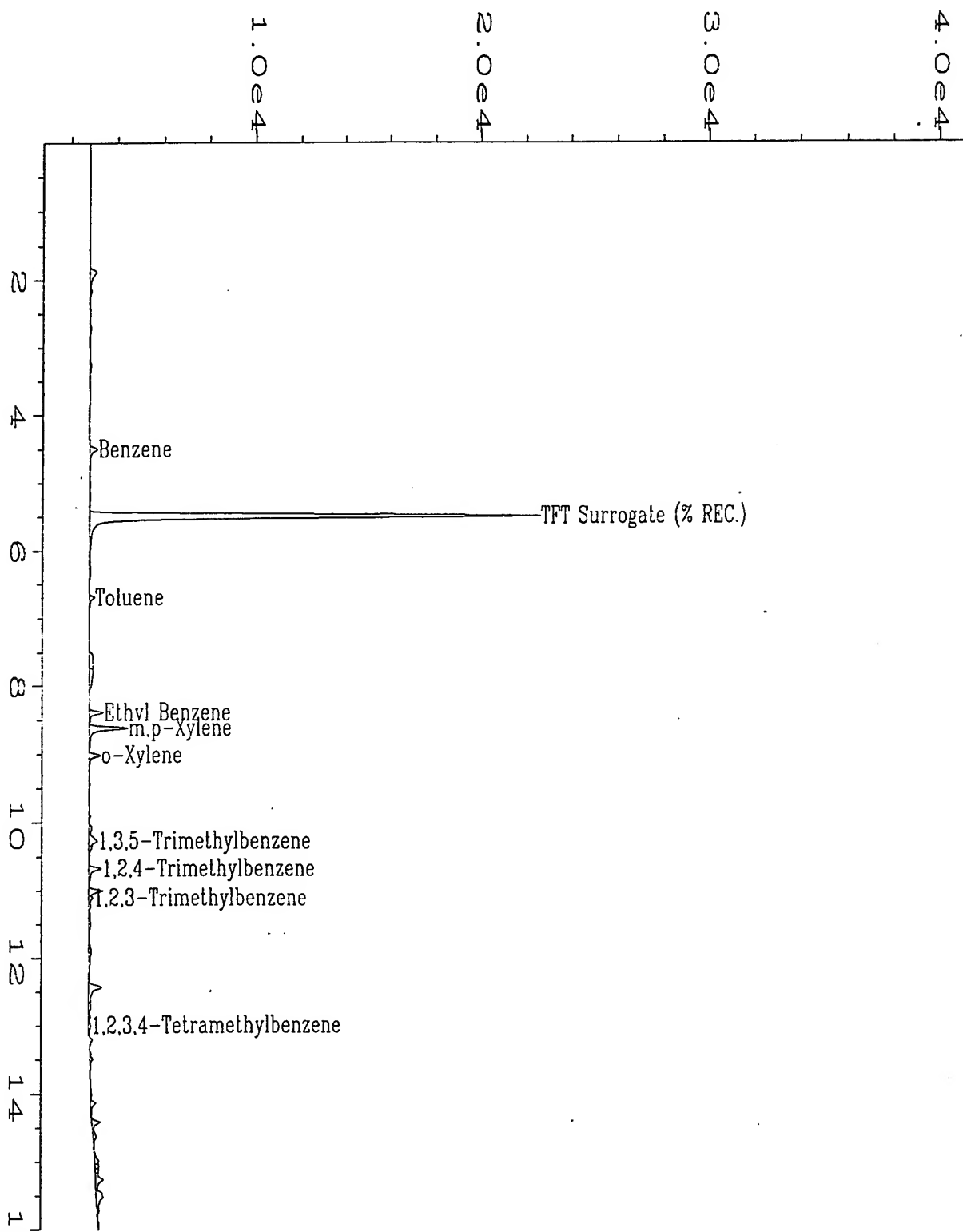
NA = Not Available/Not Applicable.



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|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\027R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 27          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05922;50;0.1                       | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Acquired on        | : 22 Apr 95 01:29 AM                  | Analysis Method    | : BX20421.MTH |
| Port Created on:   | 22 Apr 95 01:32 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 50                                  |                    |               |
| Sample Info        | : 95-1264; CPT-17; 0.100 ML WATER     |                    |               |

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4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

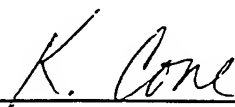
|                      |           |                    |                |
|----------------------|-----------|--------------------|----------------|
| Client Sample Number | : CPT-18  | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05923  | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95 | Dilution Factor    | : 100.00       |
| Date Received        | : 4/19/95 | Method             | : 602          |
| Date Prepared        | : 4/21/95 | Matrix             | : Water        |
| Date Analyzed        | : 4/22/95 | Lab File No.       | : BX2042128    |
|                      |           | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | 820                             | 40                   |
| Toluene   | 108-88-3                          | 200                             | 40                   |
| Chlorobenzene   | 108-90-7                          | U                               | 40                   |
| Ethyl Benzene   | 100-41-4                          | 170                             | 40                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 500                             | 40                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 72                              | 40                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 220                             | 40                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 74                              | 40                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 120                             | 40                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 93%                             | 70%-130% (QC limits) |

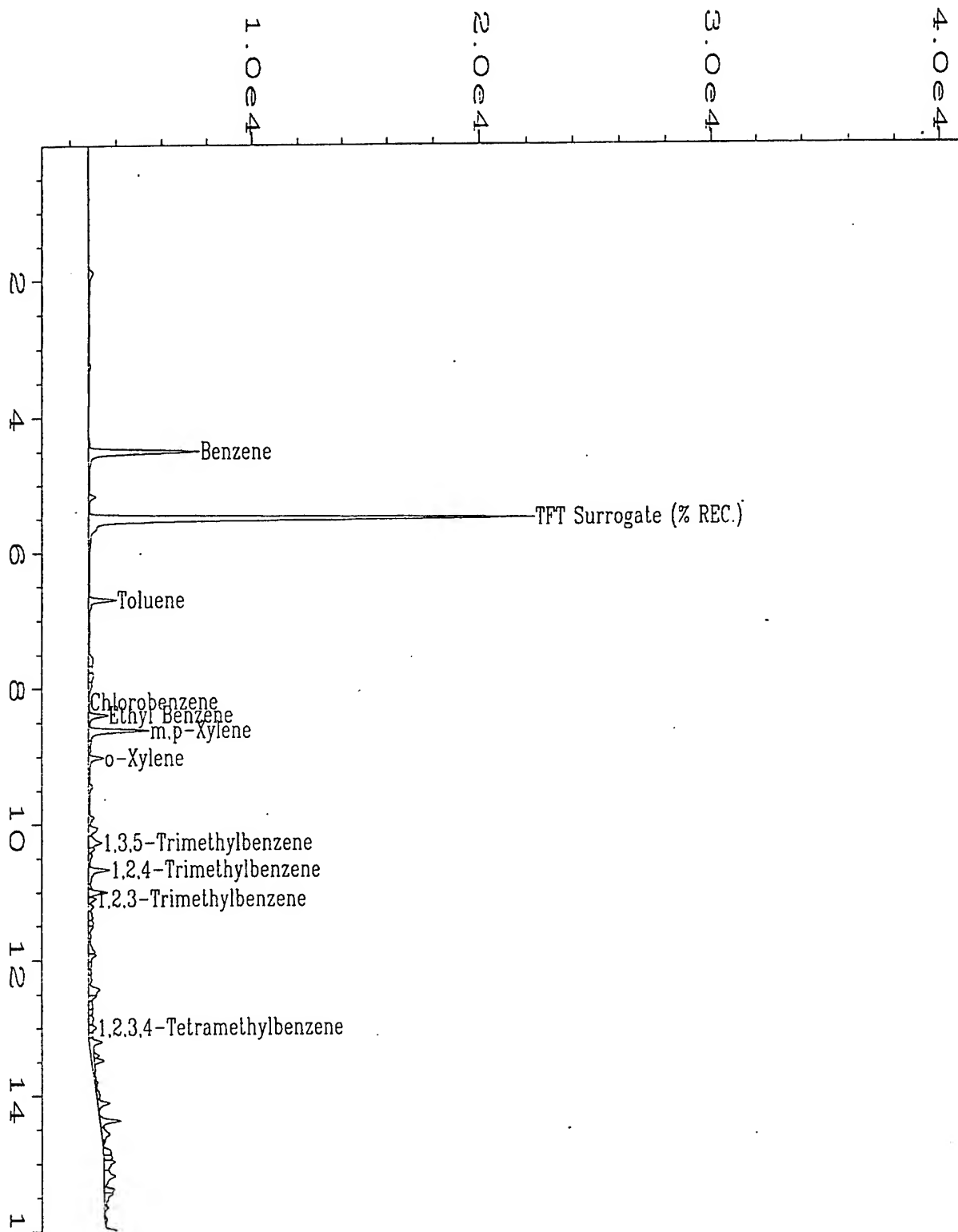
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\028R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 28          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05923;100;0.05                     | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Required on        | : 22 Apr 95 02:05 AM                  | Analysis Method    | : BX20421.MTH |
| Report Created on: | 22 Apr 95 02:21 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 100                                 |                    |               |
| Sample Info        | : 95-1264; CPT-18; 0.050 ML WATER     |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |               |                    |                |
|----------------------|---------------|--------------------|----------------|
| Client Sample Number | : Field Blank | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05924      | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95     | Dilution Factor    | : 1.00         |
| Date Received        | : 4/19/95     | Method             | : 602          |
| Date Prepared        | : 4/21/95     | Matrix             | : Water        |
| Date Analyzed        | : 4/21/95     | Lab File No.       | : BX2042117    |
|                      |               | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                               | 0.4                  |
| Toluene   | 108-88-3                          | U                               | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                               | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                               | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                               | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                               | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                               | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                               | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 92%                             | 70%-130% (QC limits) |

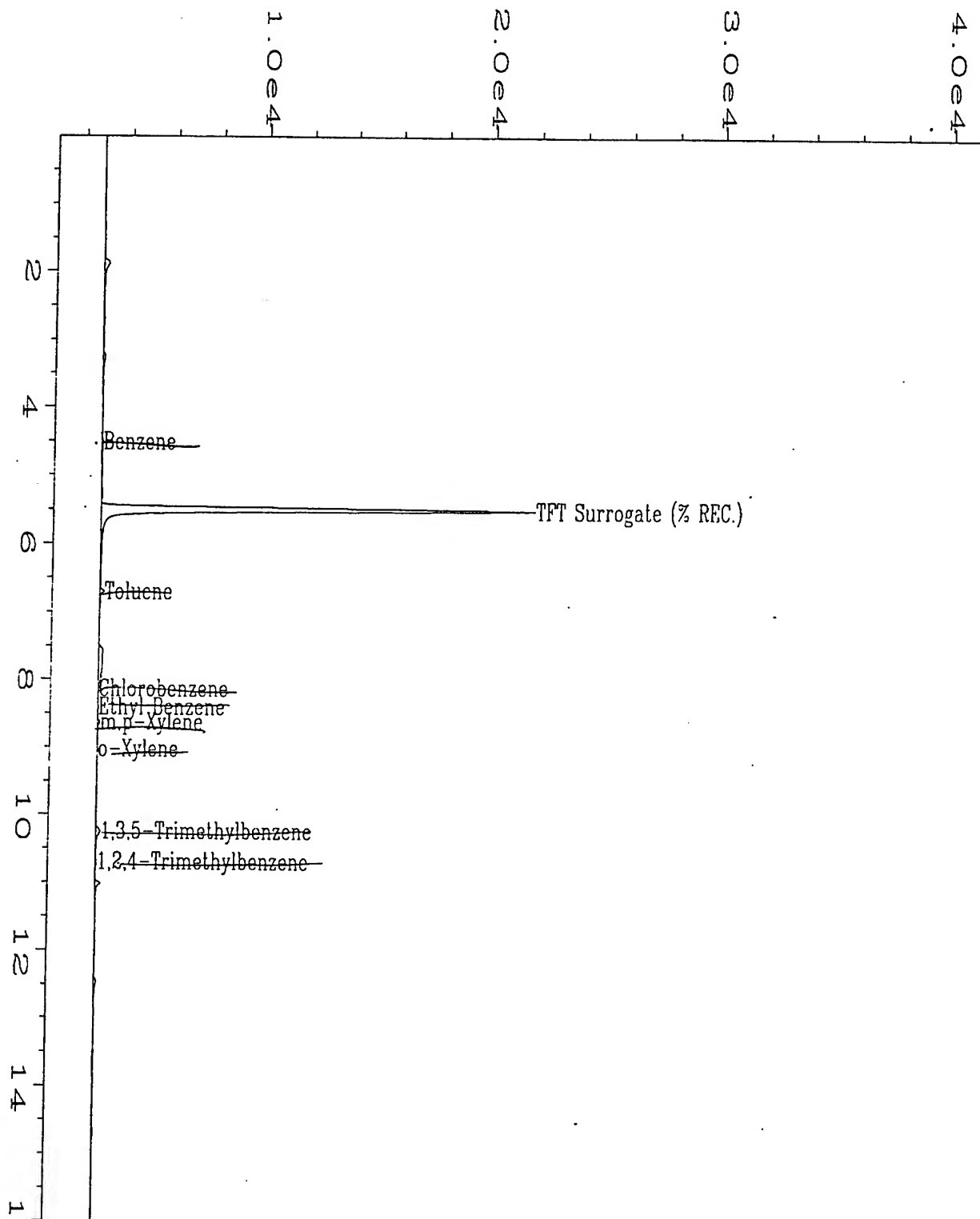
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
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|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\017R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 17          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05924;1;5                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Acquired on        | : 21 Apr 95 07:30 PM                  | Analysis Method    | : BX20421.MTH |
| Report Created on: | 21 Apr 95 07:46 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-1264; FIELD BLANK; 5 ML WATER    |                    |               |

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4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

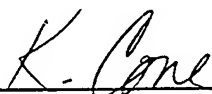
|                      |           |                    |                |
|----------------------|-----------|--------------------|----------------|
| Client Sample Number | : CPT-19  | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05925  | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95 | Dilution Factor    | : 1.00         |
| Date Received        | : 4/19/95 | Method             | : 602          |
| Date Prepared        | : 4/21/95 | Matrix             | : Water        |
| Date Analyzed        | : 4/21/95 | Lab File No.       | : BX2042118    |
|                      |           | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 104%                         | 70%-130% (QC limits) |

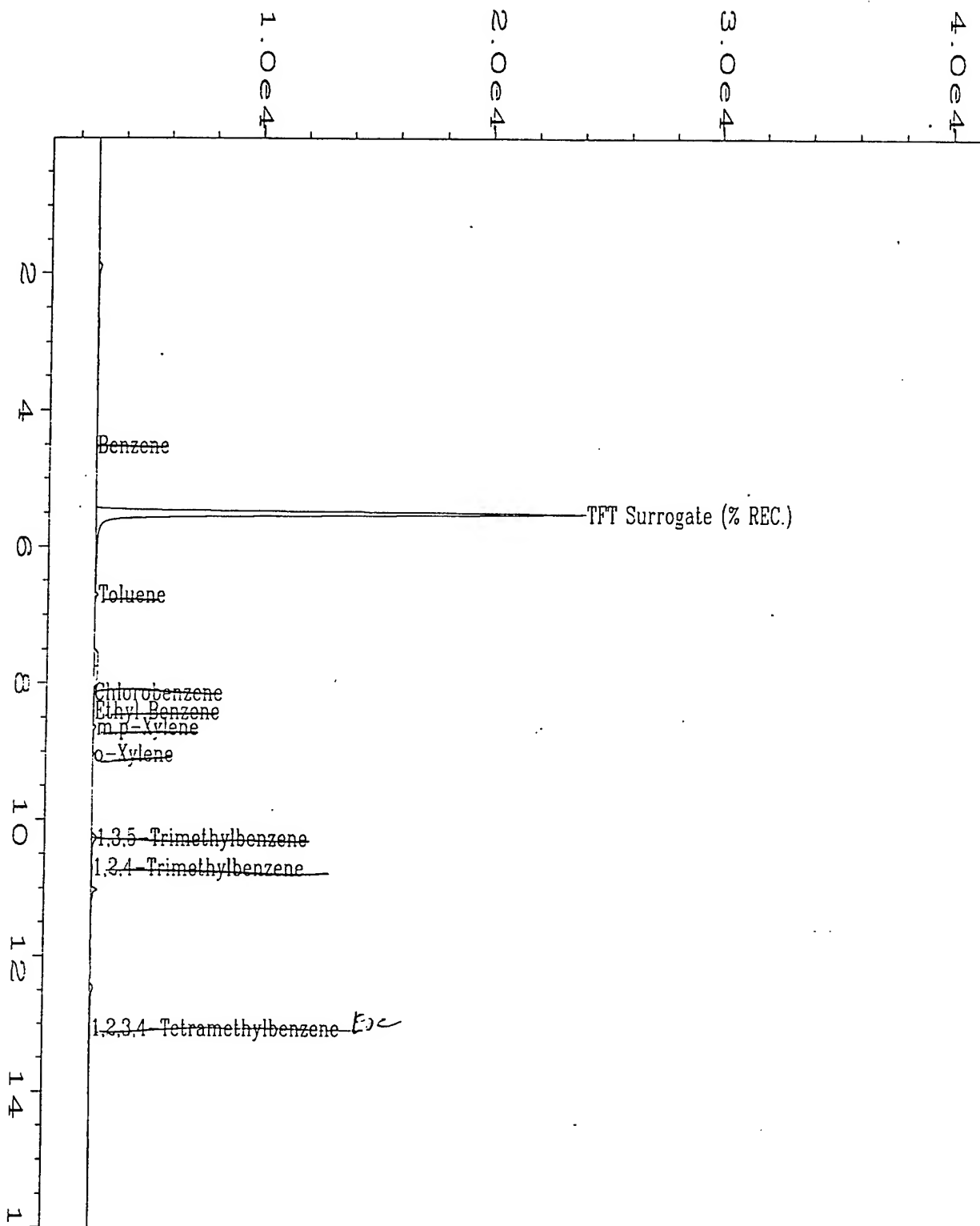
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\018R0101.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 18          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05925;1;5                          | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MTH |
| Acquired on        | : 21 Apr 95 08:06 PM                  | Analysis Method   | : BX20421.MTH |
| Report Created on: | : 22 Apr 95 12:55 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-1264; CPT-19; 5 ML WATER         |                   |               |

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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

Client Sample Number : MW-4  
Lab Sample Number : X05926  
Date Sampled : 4/18/95  
Date Received : 4/19/95  
Date Prepared : 4/21/95  
Date Analyzed : 4/22/95

Client Project No. : 722450.26020  
Lab Project No. : 95-1264  
Dilution Factor : 100.00  
Method : 602  
Matrix : Water  
Lab File No. : BX2042126  
Method Blank No. : MB042195


| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 2100                         | 40                   |
| Toluene   | 108-88-3                          | 3100                         | 40                   |
| Chlorobenzene   | 108-90-7                          | U                            | 40                   |
| Ethyl Benzene   | 100-41-4                          | 980                          | 40                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 6400                         | 40                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 200                          | 40                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 830                          | 40                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 170                          | 40                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 67                           | 40                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 89%                          | 70%-130% (QC limits) |

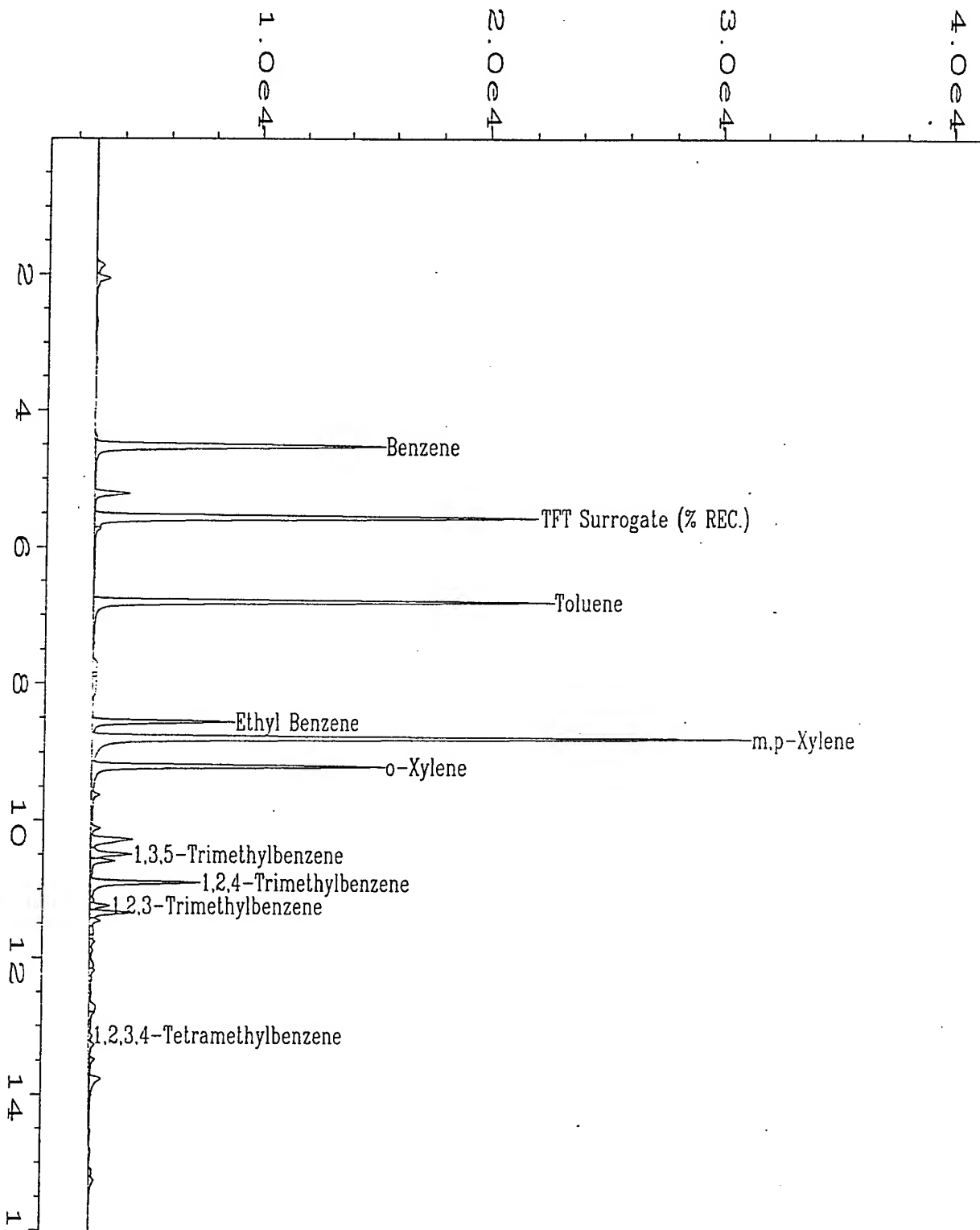
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\026R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 26          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05926;100;0.05                     | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Acquired on        | : 22 Apr 95 00:53 AM                  | Analysis Method    | : BX20421.MTH |
| Report Created on: | 22 Apr 95 01:09 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 100                                 |                    |               |
| Sample Info        | : 95-1264; MW-4; 0.050 ML WATER       |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |             |                    |                |
|----------------------|-------------|--------------------|----------------|
| Client Sample Number | : MW-4 Dupe | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05927    | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95   | Dilution Factor    | : 100.00       |
| Date Received        | : 4/19/95   | Method             | : 602          |
| Date Prepared        | : 4/21/95   | Matrix             | : Water        |
| Date Analyzed        | : 4/22/95   | Lab File No.       | : BX2042129    |
|                      |             | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 2300                         | 40                   |
| Toluene   | 108-88-3                          | 3300                         | 40                   |
| Chlorobenzene   | 108-90-7                          | U                            | 40                   |
| Ethyl Benzene   | 100-41-4                          | 1100                         | 40                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 7100                         | 40                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 210                          | 40                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 890                          | 40                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 370                          | 40                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 110                          | 40                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 93%                          | 70%-130% (QC limits) |

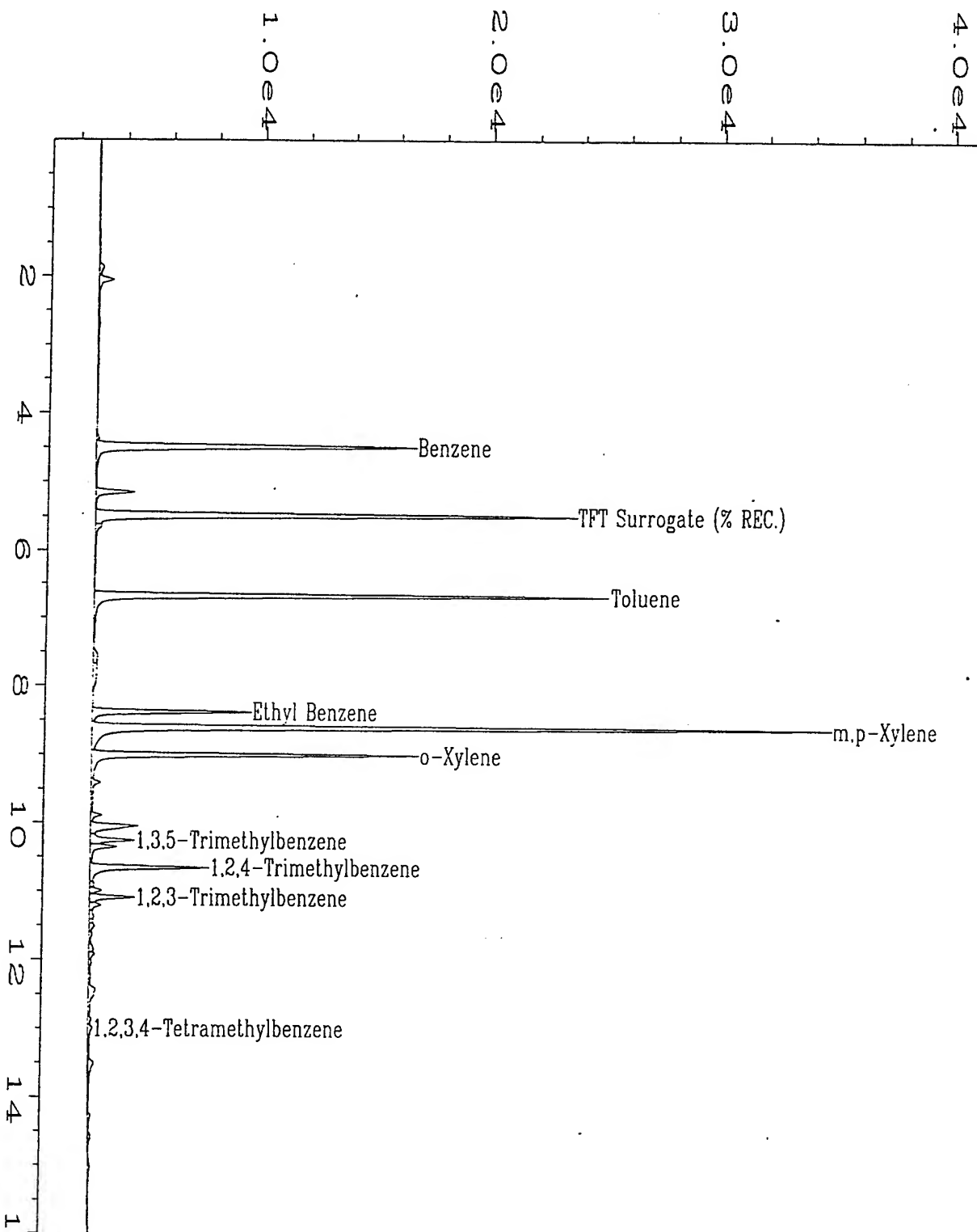
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

K. Cone  
Analyst

A. McChella  
Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\029R0101.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 29          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05927;100;0.05                     | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MTH |
| Acquired on        | : 22 Apr 95 02:41 AM                  | Analysis Method   | : BX20421.MTH |
| Report Created on: | : 22 Apr 95 02:57 AM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :             |
| Multiplier         | : 100                                 |                   |               |
| Sample Info        | : 95-1264; MW-4DUP; 0.050 ML WATER    |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |           |                    |                |
|----------------------|-----------|--------------------|----------------|
| Client Sample Number | : MW-12D  | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05928  | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95 | Dilution Factor    | : 1.00         |
| Date Received        | : 4/19/95 | Method             | : 602          |
| Date Prepared        | : 4/21/95 | Matrix             | : Water        |
| Date Analyzed        | : 4/21/95 | Lab File No.       | : BX2042119    |
|                      |           | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                              | 0.4                  |
| Toluene   | 108-88-3                          | 40                              | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                               | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | 12                              | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 62                              | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 3.2                             | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 13                              | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 4.5                             | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 2.6                             | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 100%                            | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042512 (DF = 20).

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

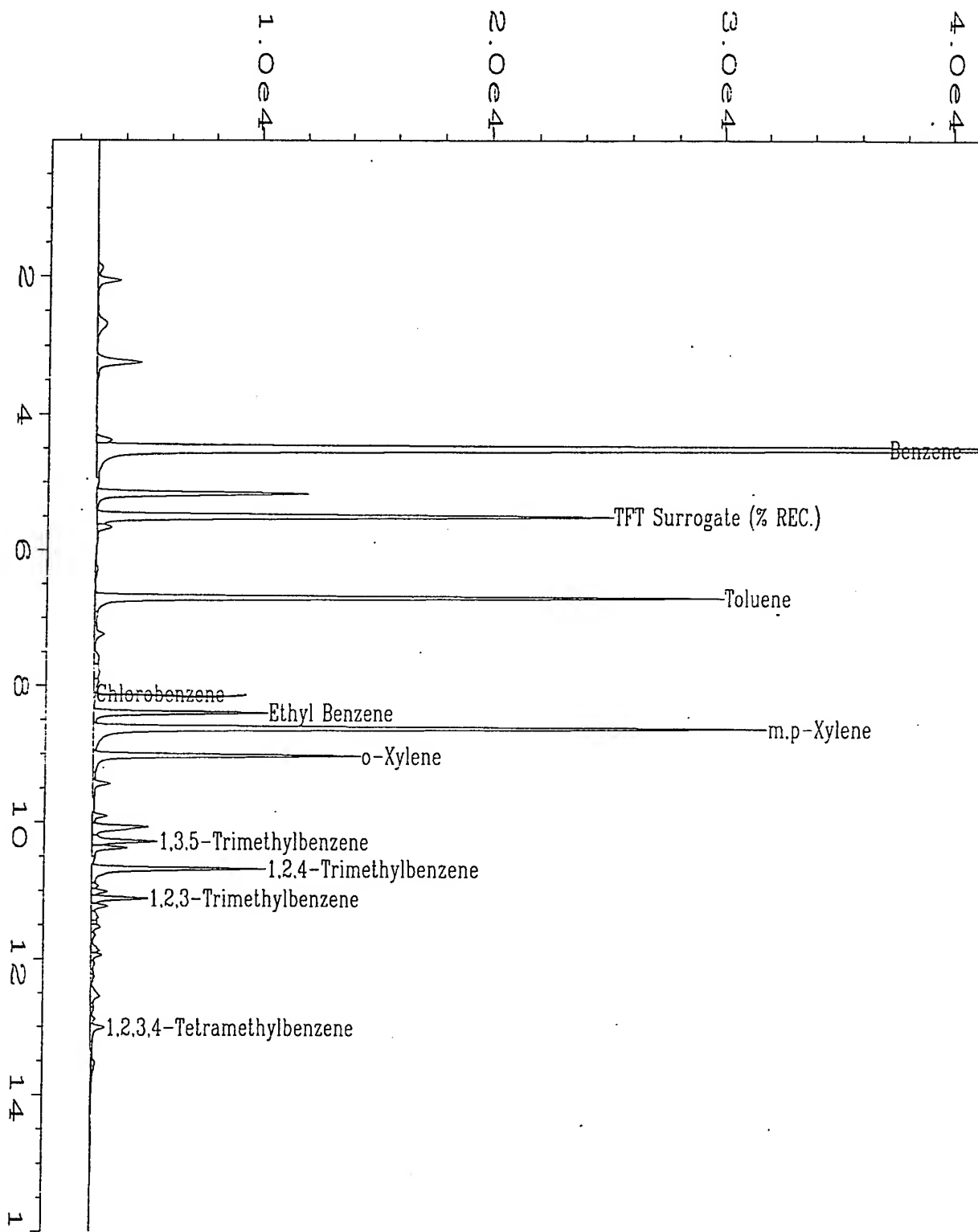
B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

Am. Clall  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\019R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 19          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05928;1;5                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Acquired on        | : 21 Apr 95 08:41 PM                  | Analysis Method    | : BX20421.MTH |
| Report Created on: | 21 Apr 95 08:58 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |
| Sample Info        | : 95-1264; MW-12D; 5 ML WATER         |                    |               |

pm 5/12/95

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Method 602 Data Report

Client Sample Number : MW-12D  
Lab Sample Number : X05928  
Date Sampled : 4/18/95  
Date Received : 4/19/95  
Date Prepared : 4/25/95  
Date Analyzed : 4/25/95

Client Project No. : 722450.26020  
Lab Project No. : 95-1264  
Dilution Factor : 20.00  
Method : 602  
Matrix : Water  
Lab File No. : BX2042512  
Method Blank No. : MB042595

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 110                          | 8.0                  |
| Toluene   | 108-88-3                          | **                           | **                   |
| Chlorobenzene   | 108-90-7                          | **                           | **                   |
| Ethyl Benzene   | 100-41-4                          | **                           | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | **                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                           | **                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                           | **                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                           | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 95%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042119.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

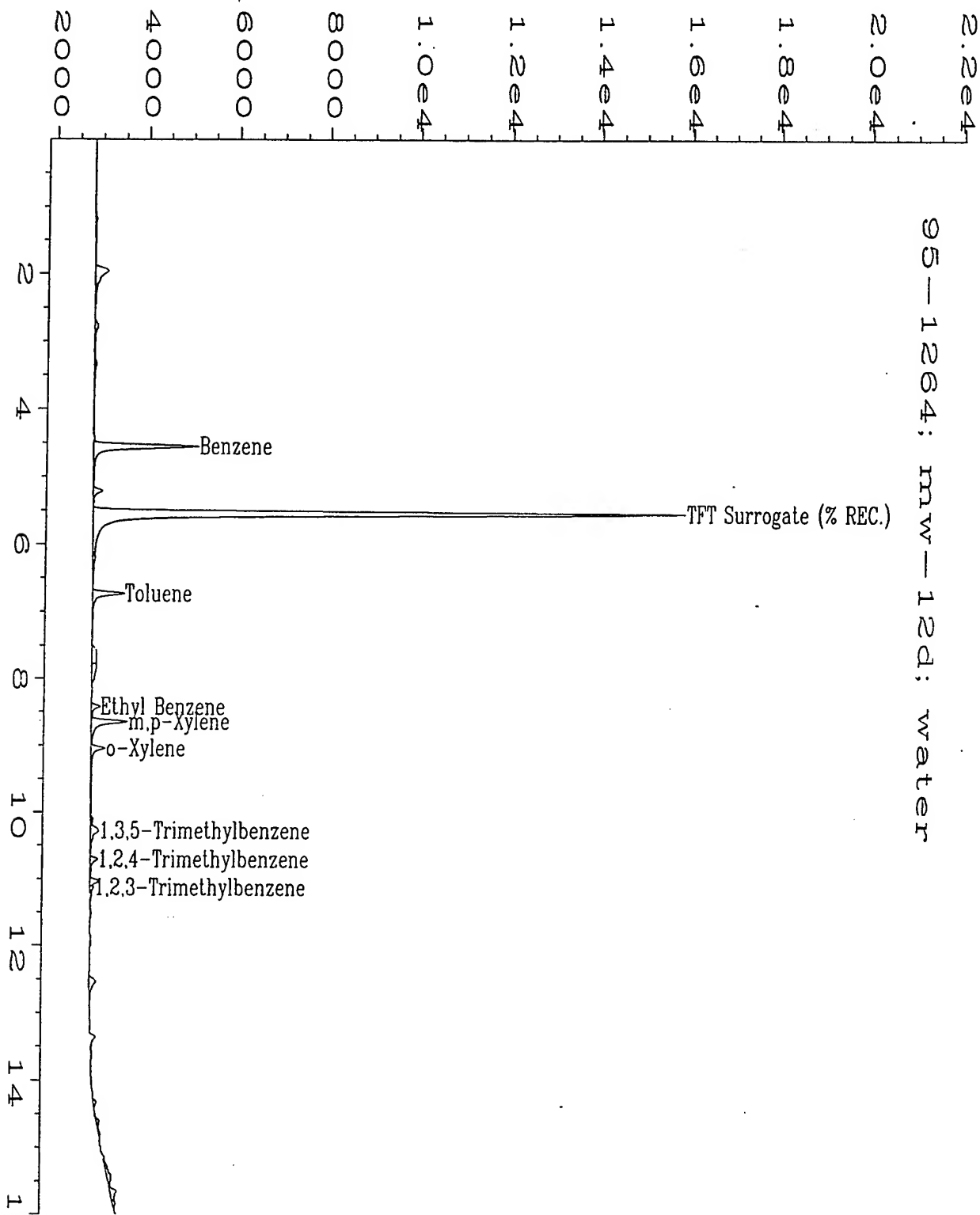
B = Compound also found in the blank.

RL = Reporting Limit.

NA = Not Available/Not Applicable.

K. Cone  
Analyst

A. McCalla  
Approved



Data File Name : D:\2\DATA\BX20425\012R0101.D  
 Operator : S.W. Tyson  
 Instrument : BTEX2  
 Sample Name : x05928;20;0.25  
 Run Time Bar Code:  
 Required on : 25 Apr 95 03:40 PM  
 Report Created on: 01 May 95 02:53 PM  
 Last Recalib on : 26 APR 95 09:49 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 12  
 Injection Number : 1  
 Sequence Line : 1  
 Instrument Method: BX20425.MTH  
 Analysis Method : BX20425.MTH  
 Sample Amount : 0  
 ISTD Amount :

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Method 602 Data Report

Client Sample Number : Trip Blank  
Lab Sample Number : X05929  
Date Sampled : 4/18/95  
Date Received : 4/19/95  
Date Prepared : 4/21/95  
Date Analyzed : 4/21/95


Client Project No. : 722450.26020  
Lab Project No. : 95-1264  
Dilution Factor : 1.00  
Method : 602  
Matrix : Water  
Lab File No. : BX2042115  
Method Blank No. : MB042195

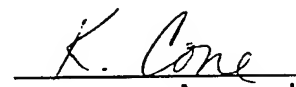
| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | U                            | 0.4                  |
| Toluene   | 108-88-3                          | U                            | 0.4                  |
| Chlorobenzene   | 108-90-7                          | U                            | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | U                            | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | U                            | 0.4                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | U                            | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | U                            | 0.4                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | U                            | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | U                            | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 91%                          | 70%-130% (QC limits) |

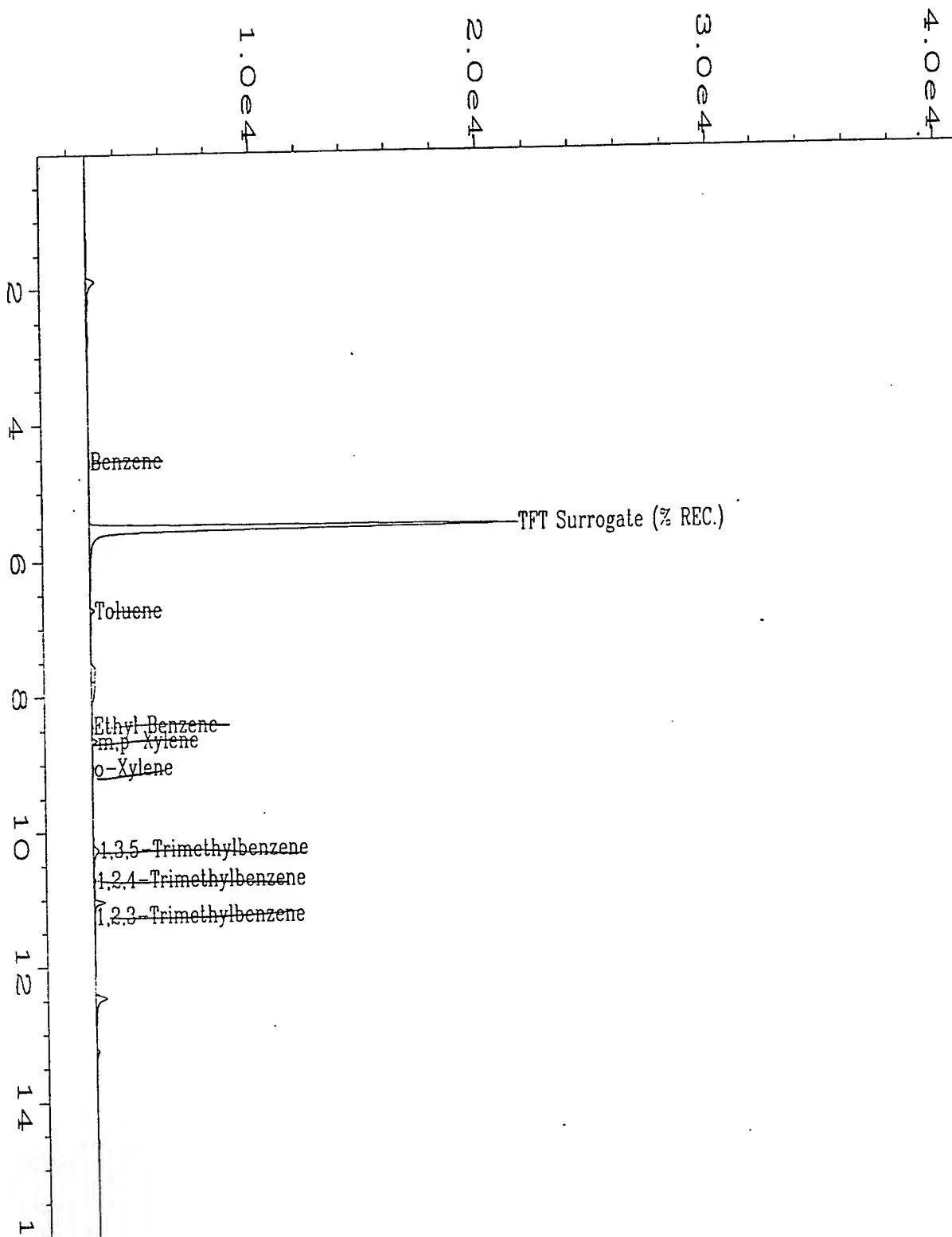
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

  
Analyst

  
Approved



Data File Name : C:\HPCHEM\2\DATA\BX20421\015R0101.D  
 Operator : T.Lockwood  
 Instrument : BTEX2  
 Sample Name : X05929;1;5  
 Run Time Bar Code:  
 Required on : 21 Apr 95 06:18 PM  
 Report Created on: 21 Apr 95 06:34 PM  
 Last Recalib on : 21 APR 95 02:28 PM  
 Multiplier : 1  
 Sample Info : 95-1264; TRIP BLANK; 5 ML WATER

Page Number : 1  
 Vial Number : 15  
 Injection Number : 1  
 Sequence Line : 1  
 Instrument Method: BX20421.MTH  
 Analysis Method : BX20421.MTH  
 Sample Amount : 0  
 ISTD Amount :

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EVERGREEN ANALYTICAL, INC.  
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(303) 425-80201

Method 8020 Data Report

|                         |                      |                    |                       |
|-------------------------|----------------------|--------------------|-----------------------|
| Client Sample Number    | : MW-13/Free Product | Client Project No. | : 722450.2602/Seymour |
| Lab Sample Number       | : X05930             | Lab Project No.    | : 95-1264             |
| Date Sampled            | : 4/18/95            | Dilution Factor    | : 125000.00           |
| Date Received           | : 4/19/95            | Method             | : 602/8020            |
| Date Extracted/Prepared | : 5/3/95             | Matrix             | : Product             |
| Date Analyzed           | : 5/3/95             | Lab File No.       | : BX2050313           |
| % Moisture              | NA                   | Method Blank No.   | : MEB2050295          |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                           | **                   |
| Toluene   | 108-88-3                          | 3500000                      | 50000                |
| Chlorobenzene   | 108-90-7                          | **                           | **                   |
| Ethyl Benzene   | 100-41-4                          | **                           | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 7300000 B                    | 50000                |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                           | **                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 5100000                      | 50000                |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                           | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 66%                          | 50%-150% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2050216 for noted values, df=50000, 05/02/95.

QUALIFIERS:

E = Extrapolated value.

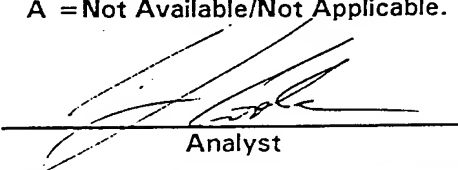
U = Compound analyzed for, but not detected.

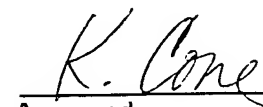
B = Compound also found in the blank.

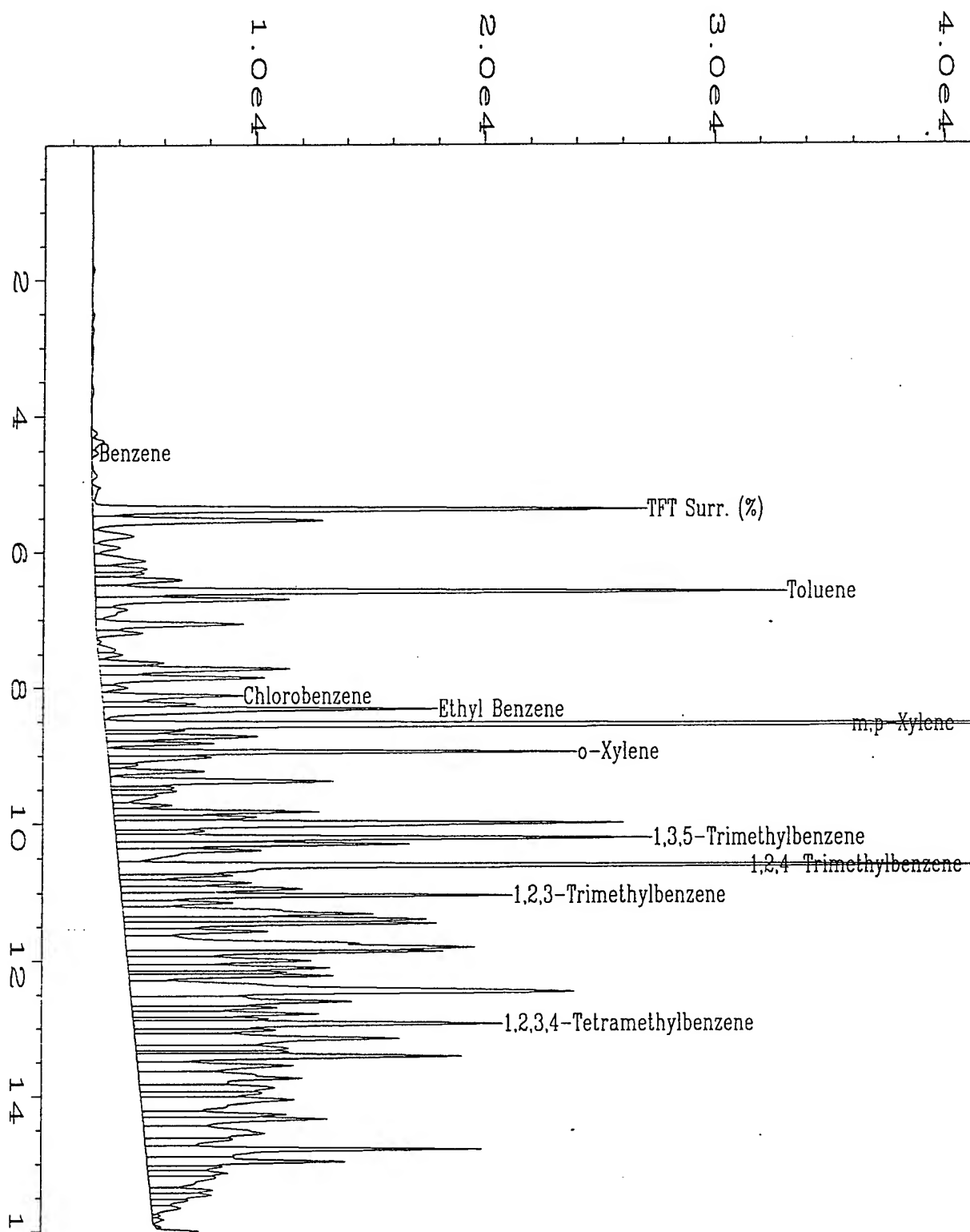
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

L = Reporting Limit.

A = Not Available/Not Applicable.

  
Analyst

  
Approved



Data File Name : C:\HPCHEM\2\DATA\BX20503\013R1001.D  
 Operator : C.J. Cook  
 Instrument : BTEX2  
 Sample Name : X05930;125000  
 Run Time Bar Code:  
 Acquired on : 03 May 95 06:21 PM  
 Report Created on: 04 May 95 08:56 AM  
 Last Recalib on : 04 MAY 95 08:47 AM  
 Multiplier : 1.25e+005  
 Sample Info : 95-1264;MW-13;100ul»10mlMeOH/4ul»5mlWater

Page Number : 1  
 Vial Number : 13  
 Injection Number : 1  
 Sequence Line : 10  
 Instrument Method: BX20503.MTH  
 Analysis Method : BX20503A.MTH  
 Sample Amount : 0  
 ISTD Amount :

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-80201

Method 8020 Data Report

|                         |                      |                    |                     |
|-------------------------|----------------------|--------------------|---------------------|
| Client Sample Number    | : MW-13/Free Product | Client Project No. | : 722450.2602/Seymo |
| Lab Sample Number       | : X05930             | Lab Project No.    | : 95-1264           |
| Date Sampled            | : 4/18/95            | Dilution Factor    | : 50000.00          |
| Date Received           | : 4/19/95            | Method             | : 602/8020          |
| Date Extracted/Prepared | : 5/2/95             | Matrix             | : Product           |
| Date Analyzed           | : 5/2/95             | Lab File No.       | : BX2050216         |
| % Moisture              | NA                   | Method Blank No.   | : MEB2050295        |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 1000000                      | 20000                |
| Toluene   | 108-88-3                          | **                           | **                   |
| Chlorobenzene   | 108-90-7                          | 780000                       | 20000                |
| Ethyl Benzene   | 100-41-4                          | 2300000                      | 20000                |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | **                   |
| ,3,5-Trimethylbenzene   | 108-67-8                          | 2300000                      | 20000                |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                           | **                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 2600000                      | 20000                |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 3600000                      | 20000                |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 106%                         | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2050313 for noted values, df = 125000, 05/03/95.

QUALIFIERS:

E = Extrapolated value.

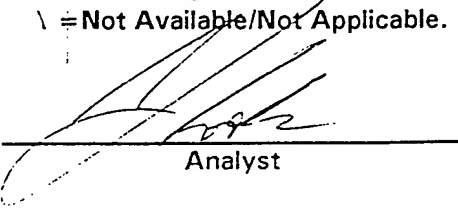
U = Compound analyzed for, but not detected.

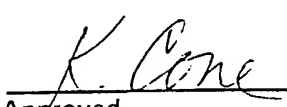
B = Compound also found in the blank.

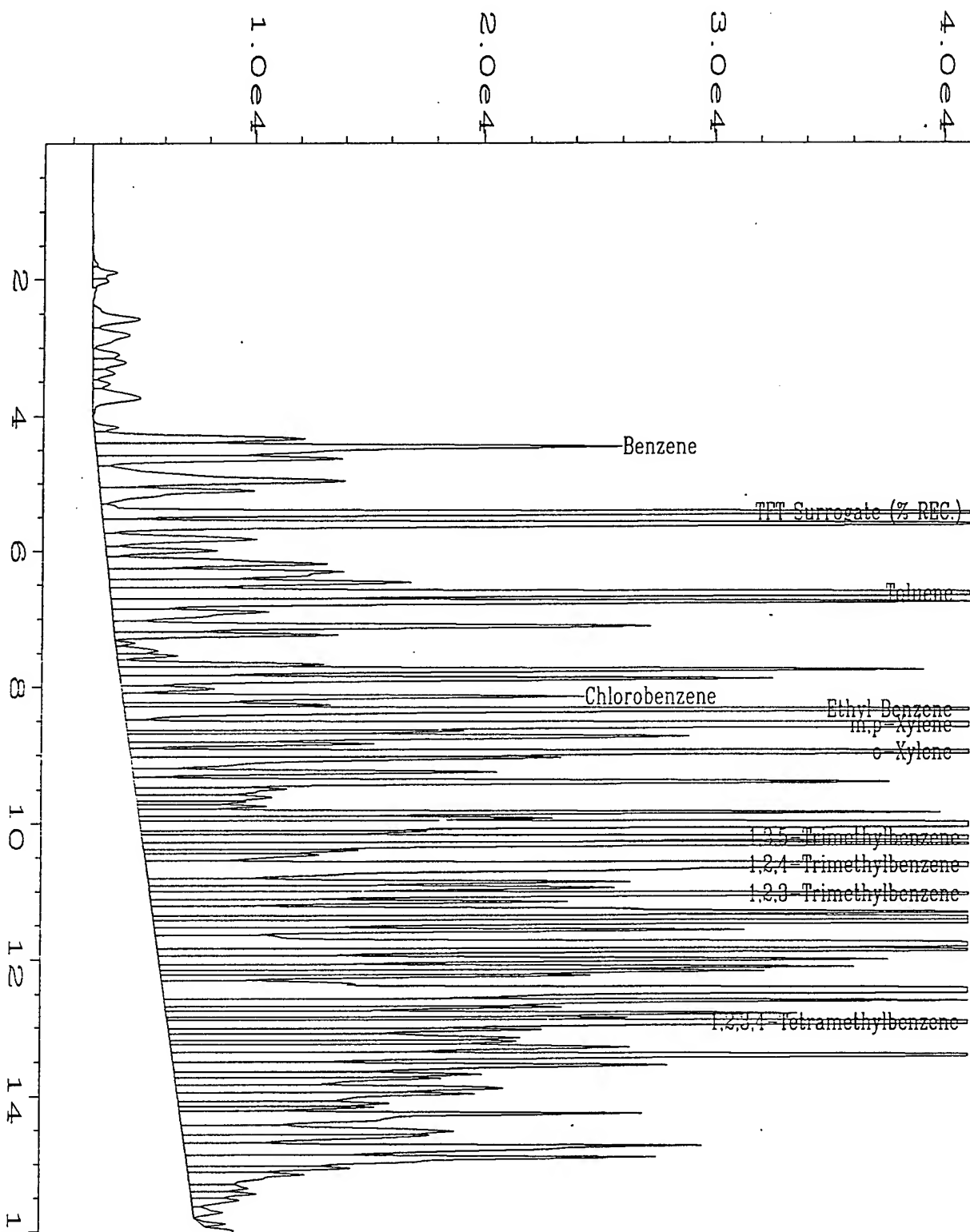
J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

RL = Reporting Limit.

\ = Not Available/Not Applicable.

  
Analyst

  
Approved



|                    |  |                   |                |
|--------------------|--|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20502\016R1001.D        | Page Number       | : 1            |
| Operator           | : C.J. Cook                                  | Vial Number       | : 16           |
| Instrument         | : BTEX2                                      | Injection Number  | : 1            |
| Sample Name        | : X05930;50000                               | Sequence Line     | : 10           |
| Run Time Bar Code: |  | Instrument Method | : BX20502.MTH  |
| Acquired on        | : 02 May 95 07:36 PM                         | Analysis Method   | : BX20502A.MTH |
| Report Created on  | : 03 May 95 02:57 PM                         | Sample Amount     | : 0            |
| Last Recalib on    | : 03 MAY 95 02:37 PM                         | ISTD Amount       | :              |
| Multiplier         | : 5e+004                                     |                   |                |
| Sample Info        | : 95-1264;MW-13;100ul»10mlMeOH/10ul»5mlWater |                   |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |                       |                    |                |
|----------------------|-----------------------|--------------------|----------------|
| Client Sample Number | : MW-5(+ BTEX MS/MSD) | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05931              | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95             | Dilution Factor    | : 12.50        |
| Date Received        | : 4/19/95             | Method             | : 602          |
| Date Prepared        | : 4/24/95             | Matrix             | : Water        |
| Date Analyzed        | : 4/25/95             | Lab File No.       | : BX2042411    |
|                      |                       | Method Blank No.   | : MB042495     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L |   | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|---|----------------------|
| Benzene   | 71-43-2                           | 240                          | B | 5.0                  |
| Toluene   | 108-88-3                          | **                           |   | **                   |
| Chlorobenzene   | 108-90-7                          | **                           |   | **                   |
| Ethyl Benzene   | 100-41-4                          | **                           |   | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 95                           | B | 5.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                           |   | **                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 20                           |   | 5.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                           |   | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           |   | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 88%                          |   | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042122.

QUALIFIERS:

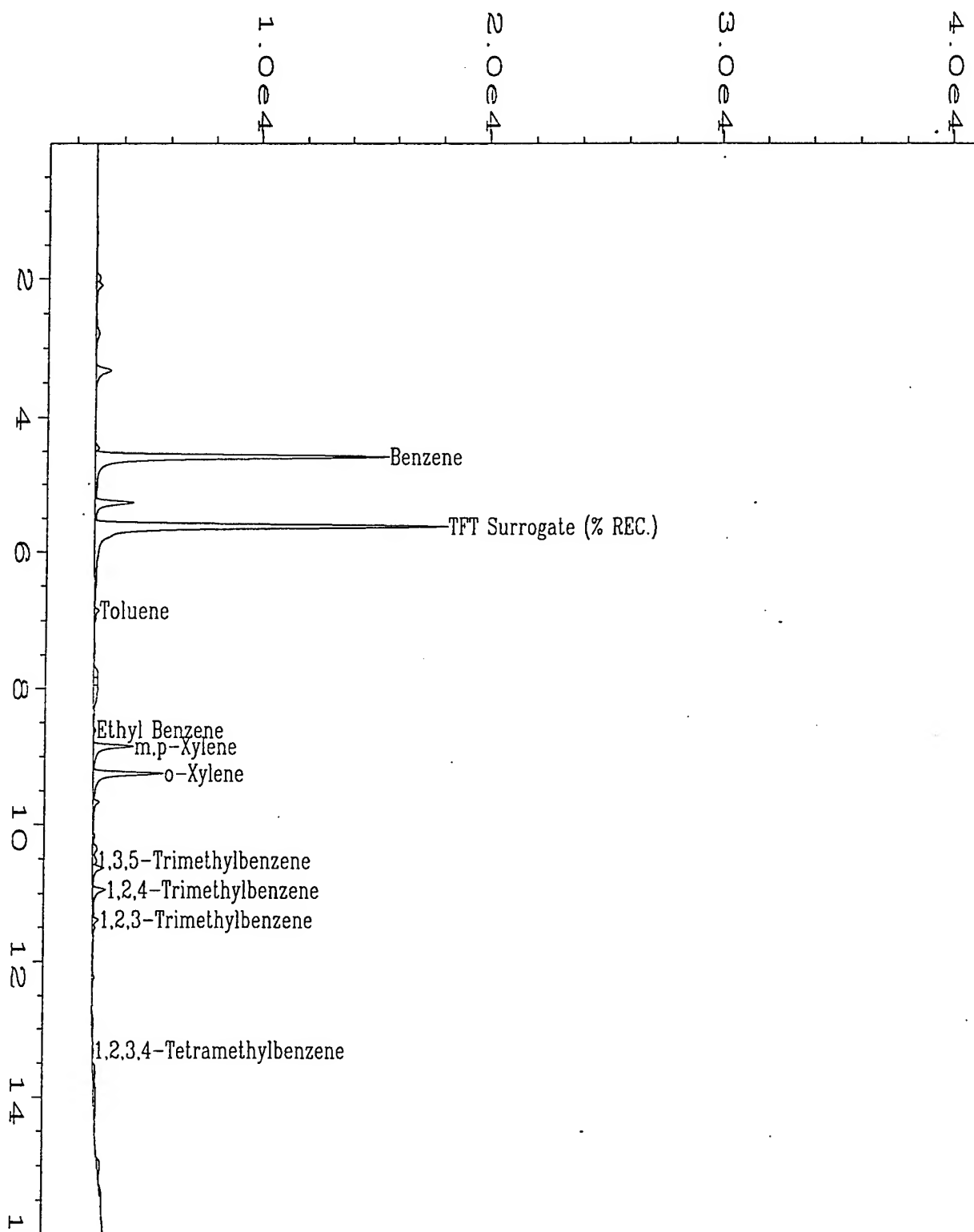
E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*P. McClellan*

Approved



|                    |                                       |                    |                          |
|--------------------|---------------------------------------|--------------------|--------------------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\011R0901.D | Page Number        | : 1                      |
| Operator           | : T.Lockwood                          | Vial Number        | : 11                     |
| Instrument         | : BTEX2                               | Injection Number   | : 1                      |
| Sample Name        | : X05931;12.5;0.4                     | Sequence Line      | : 9                      |
| Run Time Bar Code: |                                       | Instrument Method: | BX20424.MTH              |
| Printed on         | : 25 Apr 95 02:24 AM                  | Analysis Method    | : BX20424.MTH            |
| Report Created on: | 25 Apr 95 11:13 AM                    | Sample Amount      | : 0                      |
| Last Recalib on    | : 25 APR 95 10:43 AM                  | ISTD Amount        | :                        |
| Multiplier         | : 12.5                                |                    |                          |
| Sample Info        | : Project#: 95-1264                   | Client#:           | MW-5(+BTEX MS/MSD) WATER |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |                       |                    |                |
|----------------------|-----------------------|--------------------|----------------|
| Client Sample Number | : MW-5( +BTEX MS/MSD) | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05931              | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95             | Dilution Factor    | : 1.00         |
| Date Received        | : 4/19/95             | Method             | : 602          |
| Date Prepared        | : 4/21/95             | Matrix             | : Water        |
| Date Analyzed        | : 4/21/95             | Lab File No.       | : BX2042122    |
|                      |                       | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                           | **                   |
| Toluene   | 108-88-3                          | 4.6                          | 0.4                  |
| Chlorobenzene   | 108-90-7                          | 1.4                          | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | 4.0                          | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | **                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 2.2                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                           | **                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 37                           | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 18                           | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 104%                         | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042411 (DF=12.5).

QUALIFIERS:

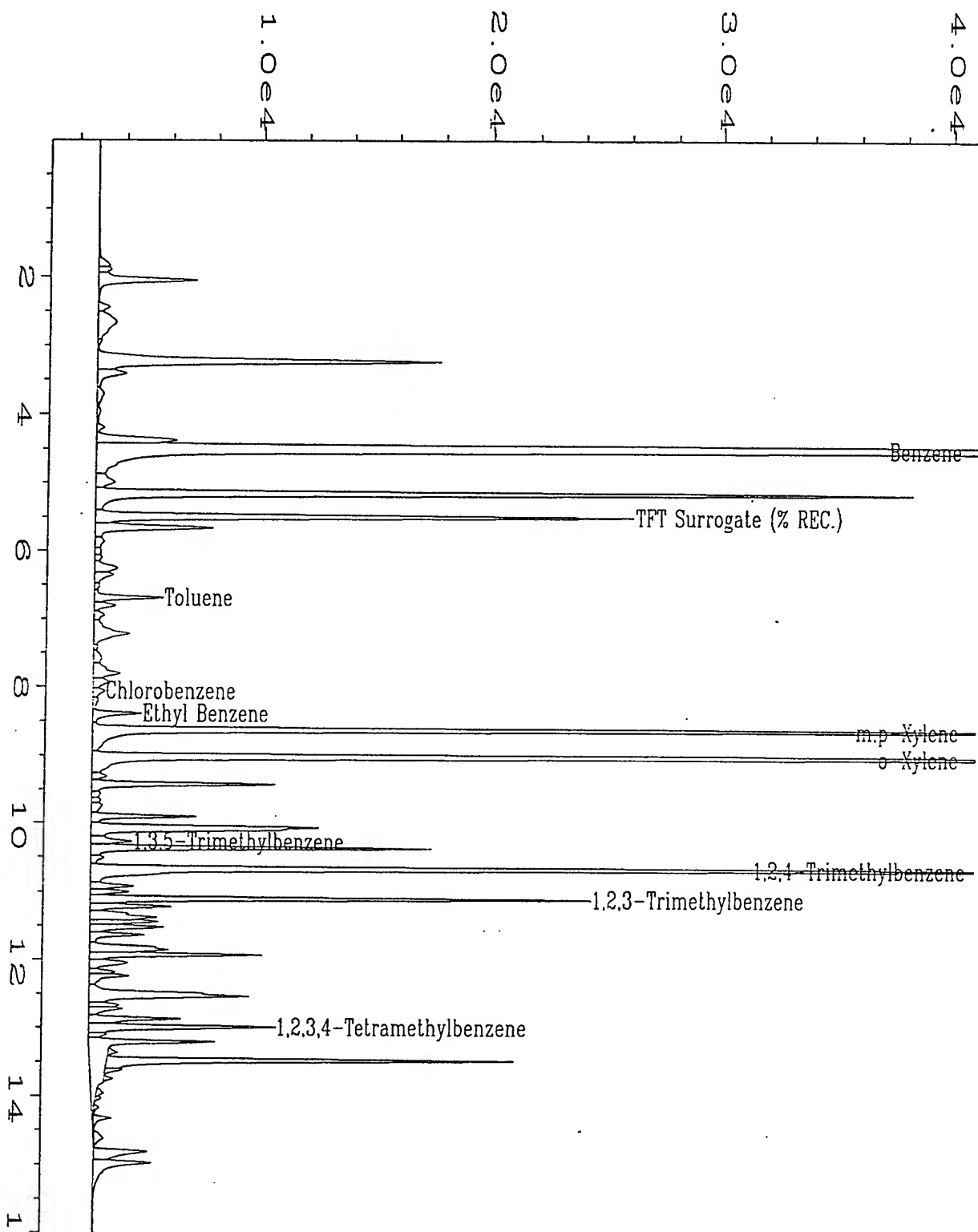
E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*A. McClellan*

Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\022R0101.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 22          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05931;1;5                          | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MTH |
| Acquired on        | : 21 Apr 95 10:29 PM                  | Analysis Method   | : BX20421.MTH |
| Report Created on  | : 21 Apr 95 10:46 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-1264; MW-12D; 5 ML WATER         |                   |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |                      |                    |                |
|----------------------|----------------------|--------------------|----------------|
| Client Sample Number | : MW-5(+BTEX MS/MSD) | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05931Dup          | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95            | Dilution Factor    | : 12.50        |
| Date Received        | : 4/19/95            | Method             | : 602          |
| Date Prepared        | : 4/24/95            | Matrix             | : Water        |
| Date Analyzed        | : 4/25/95            | Lab File No.       | : BX2042412    |
|                      |                      | Method Blank No.   | : MB042495     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L |   | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|---|----------------------|
| Benzene   | 71-43-2                           | 240                          | B | 5.0                  |
| Toluene   | 108-88-3                          | **                           |   | **                   |
| Chlorobenzene   | 108-90-7                          | **                           |   | **                   |
| Ethyl Benzene   | 100-41-4                          | **                           |   | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 98                           | B | 5.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                           |   | **                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 22                           |   | 5.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                           |   | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           |   | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 91%                          |   | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042123.

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

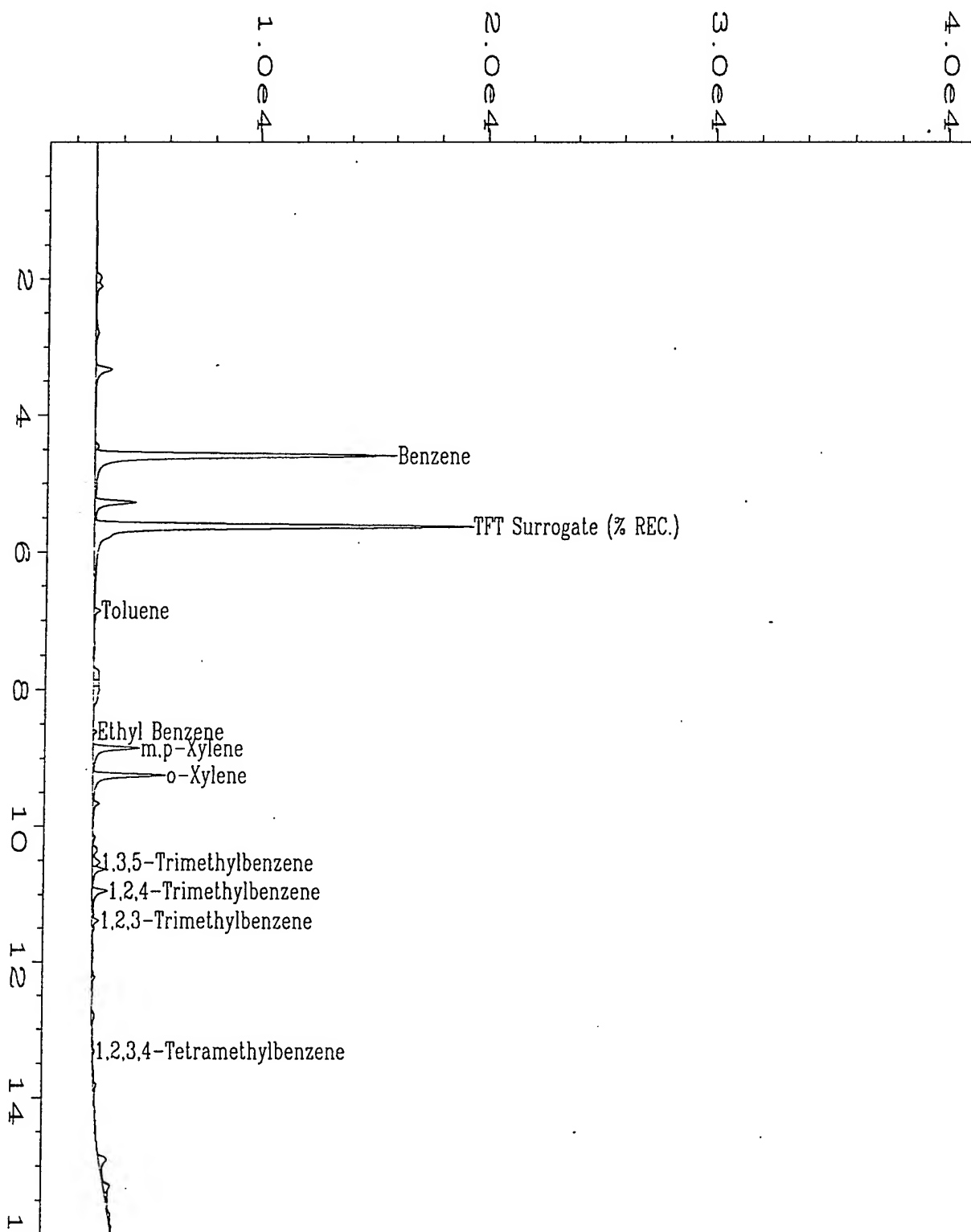
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*Amcler*

Approved



|                    |                                       |                   |                          |
|--------------------|---------------------------------------|-------------------|--------------------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\012R0901.D | Page Number       | : 1                      |
| Operator           | : T.Lockwood                          | Vial Number       | : 12                     |
| Instrument         | : BTEX2                               | Injection Number  | : 1                      |
| Sample Name        | : X05931DUP12.5;.4                    | Sequence Line     | : 9                      |
| Run Time Bar Code: |                                       | Instrument Method | : BX20424.MTH            |
| Required on        | : 25 Apr 95 03:03 AM                  | Analysis Method   | : BX20424.MTH            |
| Report Created on  | : 25 Apr 95 11:13 AM                  | Sample Amount     | : 0                      |
| Last Recalib on    | : 25 APR 95 10:43 AM                  | ISTD Amount       | :                        |
| Multiplier         | : 12.5                                |                   |                          |
| Sample Info        | : Project#: 95-1264                   | Client#:          | MW-5(+BTEX MS/MSD) WATER |

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4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Method 602 Data Report

|                      |                        |                    |                |
|----------------------|------------------------|--------------------|----------------|
| Client Sample Number | : MW-5 (+ BTEX MS/MSD) | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05931Dup            | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95              | Dilution Factor    | : 1.00         |
| Date Received        | : 4/19/95              | Method             | : 602          |
| Date Prepared        | : 4/21/95              | Matrix             | : Water        |
| Date Analyzed        | : 4/21/95              | Lab File No.       | : BX2042123    |
|                      |                        | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                           | **                   |
| Toluene   | 108-88-3                          | 4.0                          | 0.4                  |
| Chlorobenzene   | 108-90-7                          | 1.2                          | 0.4                  |
| Ethyl Benzene   | 100-41-4                          | 3.6                          | 0.4                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                           | **                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 1.9                          | 0.4                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                           | **                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 34                           | 0.4                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 16                           | 0.4                  |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 99%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042412 (DF = 12.5).

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

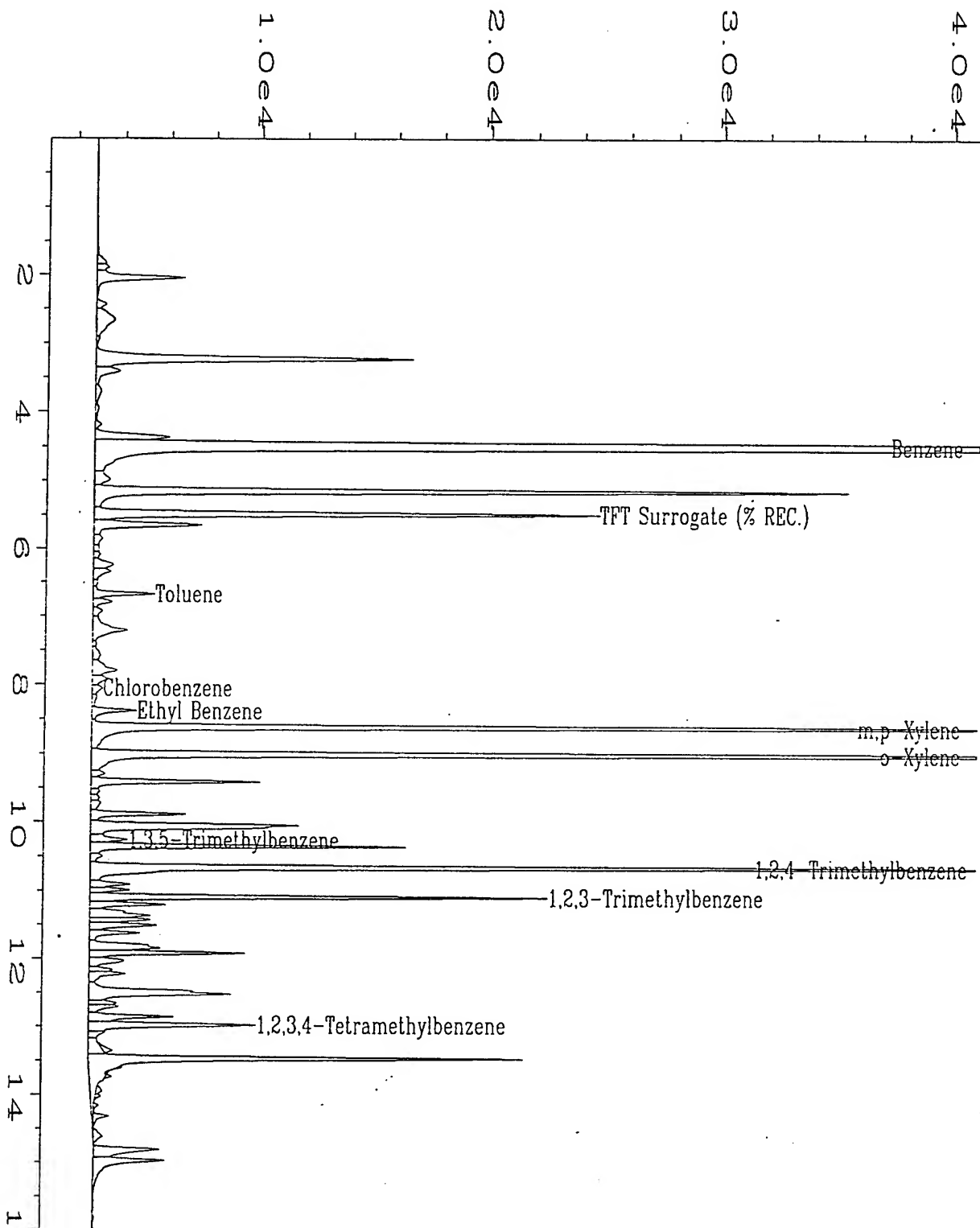
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*AmCleb*

Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\023R0101.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 23          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05931DUP;1;5                       | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MTH |
| Acquired on        | : 21 Apr 95 11:05 PM                  | Analysis Method   | : BX20421.MTH |
| Port Created on:   | : 21 Apr 95 11:21 PM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :             |
| Multiplier         | : 1                                   |                   |               |
| Sample Info        | : 95-1264; MW-12D; 5 ML WATER         |                   |               |

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(303) 425-6021

Method 602 Data Report

|                      |           |                    |                |
|----------------------|-----------|--------------------|----------------|
| Client Sample Number | : MW-8    | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05932  | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95 | Dilution Factor    | : 100.00       |
| Date Received        | : 4/19/95 | Method             | : 602          |
| Date Prepared        | : 4/21/95 | Matrix             | : Water        |
| Date Analyzed        | : 4/22/95 | Lab File No.       | : BX2042130    |
|                      |           | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 410                          | 40                   |
| Toluene   | 108-88-3                          | 120                          | 40                   |
| Chlorobenzene   | 108-90-7                          | U                            | 40                   |
| Ethyl Benzene   | 100-41-4                          | 260                          | 40                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 540                          | 40                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 63                           | 40                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 170                          | 40                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 70                           | 40                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 100                          | 40                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 88%                          | 70%-130% (QC limits) |

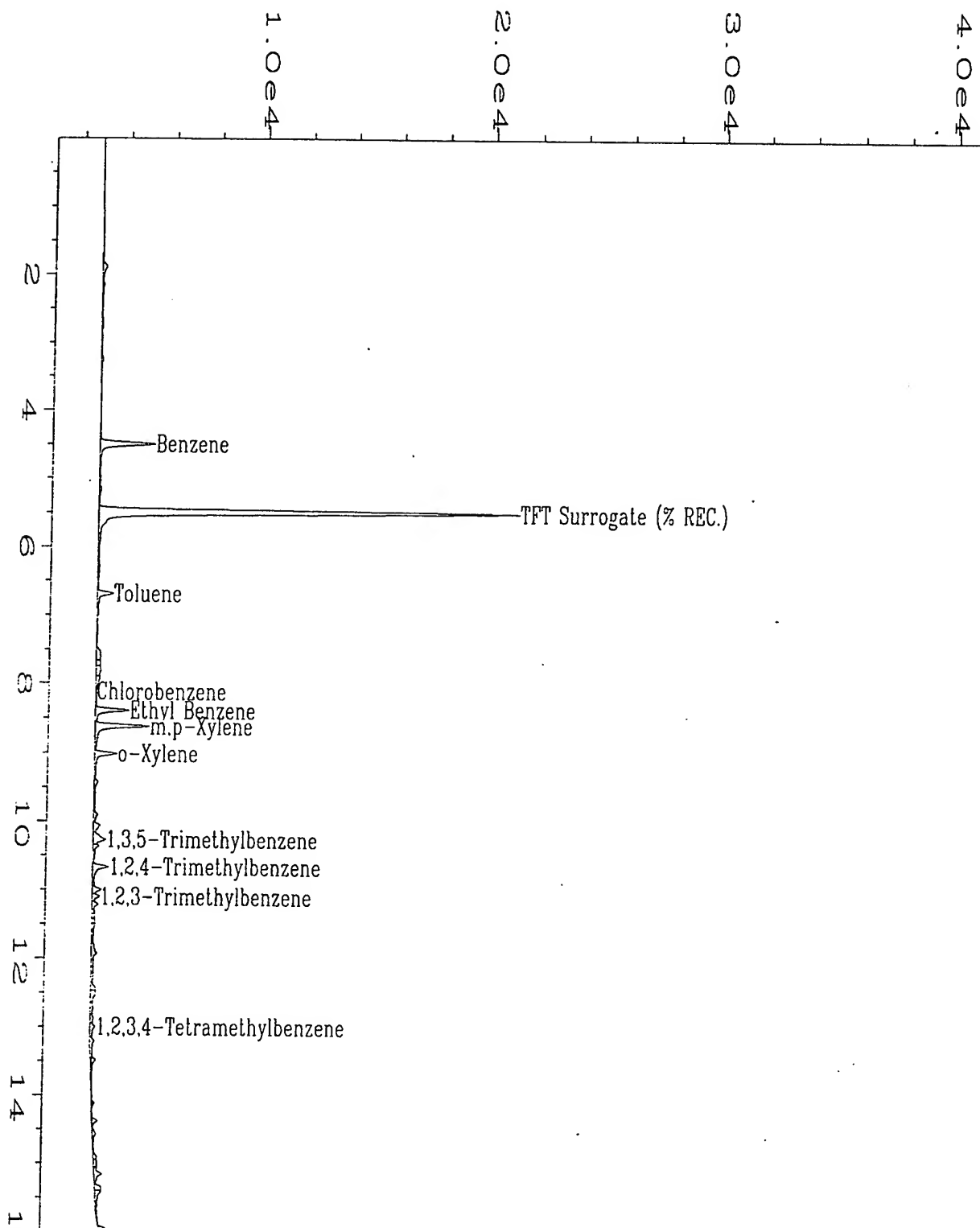
Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

K. Cone  
Analyst

AmCelle  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\030R0101.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 30          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05932;100;0.05                     | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20421.MTH   |
| Acquired on        | : 22 Apr 95 03:17 AM                  | Analysis Method    | : BX20421.MTH |
| Report Created on: | 22 Apr 95 03:33 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount        | :             |
| Multiplier         | : 100                                 |                    |               |
| Sample Info        | : 95-1264; MW-8; 0.050 ML WATER       |                    |               |

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Method 602 Data Report

|                      |           |                    |                |
|----------------------|-----------|--------------------|----------------|
| Client Sample Number | : MW-3    | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05933  | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95 | Dilution Factor    | : 10.00        |
| Date Received        | : 4/19/95 | Method             | : 602          |
| Date Prepared        | : 4/24/95 | Matrix             | : Water        |
| Date Analyzed        | : 4/25/95 | Lab File No.       | : BX2042417    |
|                      |           | Method Blank No.   | : MB042495     |

| Compound Name   | Cas Number                        | Sample Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|------------------------------|----------------------|
| Benzene   | 71-43-2                           | 280 B                        | 4.0                  |
| Toluene   | 108-88-3                          | 18                           | 4.0                  |
| Chlorobenzene   | 108-90-7                          | U                            | 4.0                  |
| Ethyl Benzene   | 100-41-4                          | 140                          | 4.0                  |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | 170 B                        | 4.0                  |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | 4.5                          | 4.0                  |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | 58                           | 4.0                  |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | 13                           | 4.0                  |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | **                           | **                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 77%                          | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

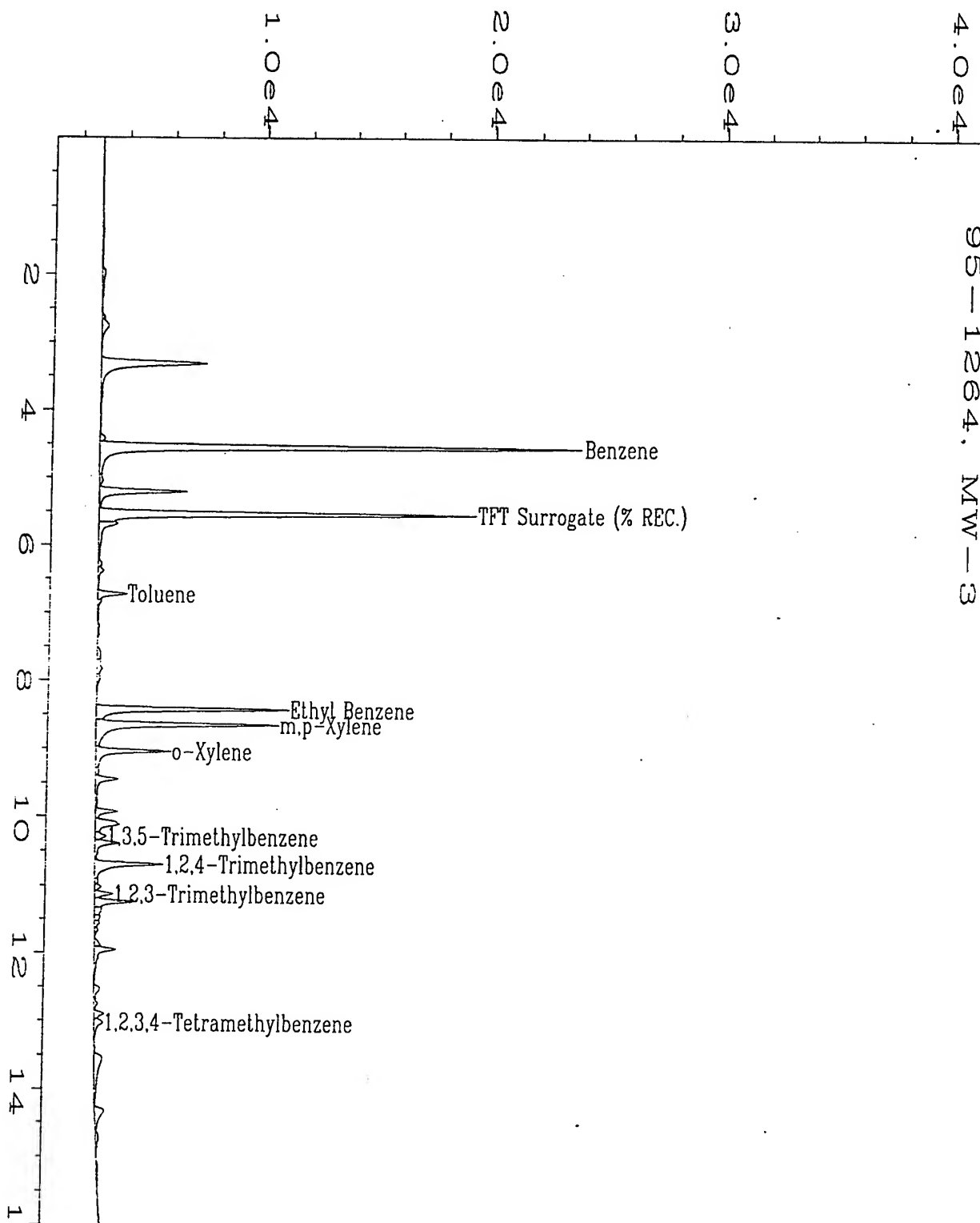
\*\* = See BX2042131 (DF=100).

QUALIFIERS:

E = Extrapolated value.  
U = Compound analyzed for, but not detected.  
B = Compound also found in the blank.  
RL = Reporting Limit.  
NA = Not Available/Not Applicable.

K. Cone  
Analyst

Amclella  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\017R0901.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 17          |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : X05933;10;0.5                       | Sequence Line      | : 9           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20424.MTH   |
| Acquired on        | : 25 Apr 95 06:17 AM                  | Analysis Method    | : BX20424.MTH |
| Report Created on: | 25 Apr 95 12:39 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 25 APR 95 10:43 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

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Method 602 Data Report

|                      |           |                    |                |
|----------------------|-----------|--------------------|----------------|
| Client Sample Number | : MW-3    | Client Project No. | : 722450.26020 |
| Lab Sample Number    | : X05933  | Lab Project No.    | : 95-1264      |
| Date Sampled         | : 4/18/95 | Dilution Factor    | : 100.00       |
| Date Received        | : 4/19/95 | Method             | : 602          |
| Date Prepared        | : 4/21/95 | Matrix             | : Water        |
| Date Analyzed        | : 4/22/95 | Lab File No.       | : BX2042131    |
|                      |           | Method Blank No.   | : MB042195     |

| Compound Name   | Cas Number                        | Sample<br>Concentration<br>ug/L | RL<br>ug/L           |
|---|-----------------------------------|---------------------------------|----------------------|
| Benzene   | 71-43-2                           | **                              | **                   |
| Toluene   | 108-88-3                          | **                              | **                   |
| Chlorobenzene   | 108-90-7                          | **                              | **                   |
| Ethyl Benzene   | 100-41-4                          | **                              | **                   |
| Total Xylenes<br>(m, p & o)                                     | 108-38-3, 106-42-3<br>and 95-47-6 | **                              | **                   |
| 1,3,5-Trimethylbenzene  | 108-67-8                          | **                              | **                   |
| 1,2,4-Trimethylbenzene  | 95-63-6                           | **                              | **                   |
| 1,2,3-Trimethylbenzene  | 526-73-8                          | **                              | **                   |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3                          | 66                              | 40                   |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                                   | 88%                             | 70%-130% (QC limits) |

Note: Total Xylenes consist of three isomers, two of which co-elute.  
The Xylene RL is for a single peak.

\*\* = See BX2042417 (DF = 10).

QUALIFIERS:

E = Extrapolated value.

U = Compound analyzed for, but not detected.

B = Compound also found in the blank.

RL = Reporting Limit.

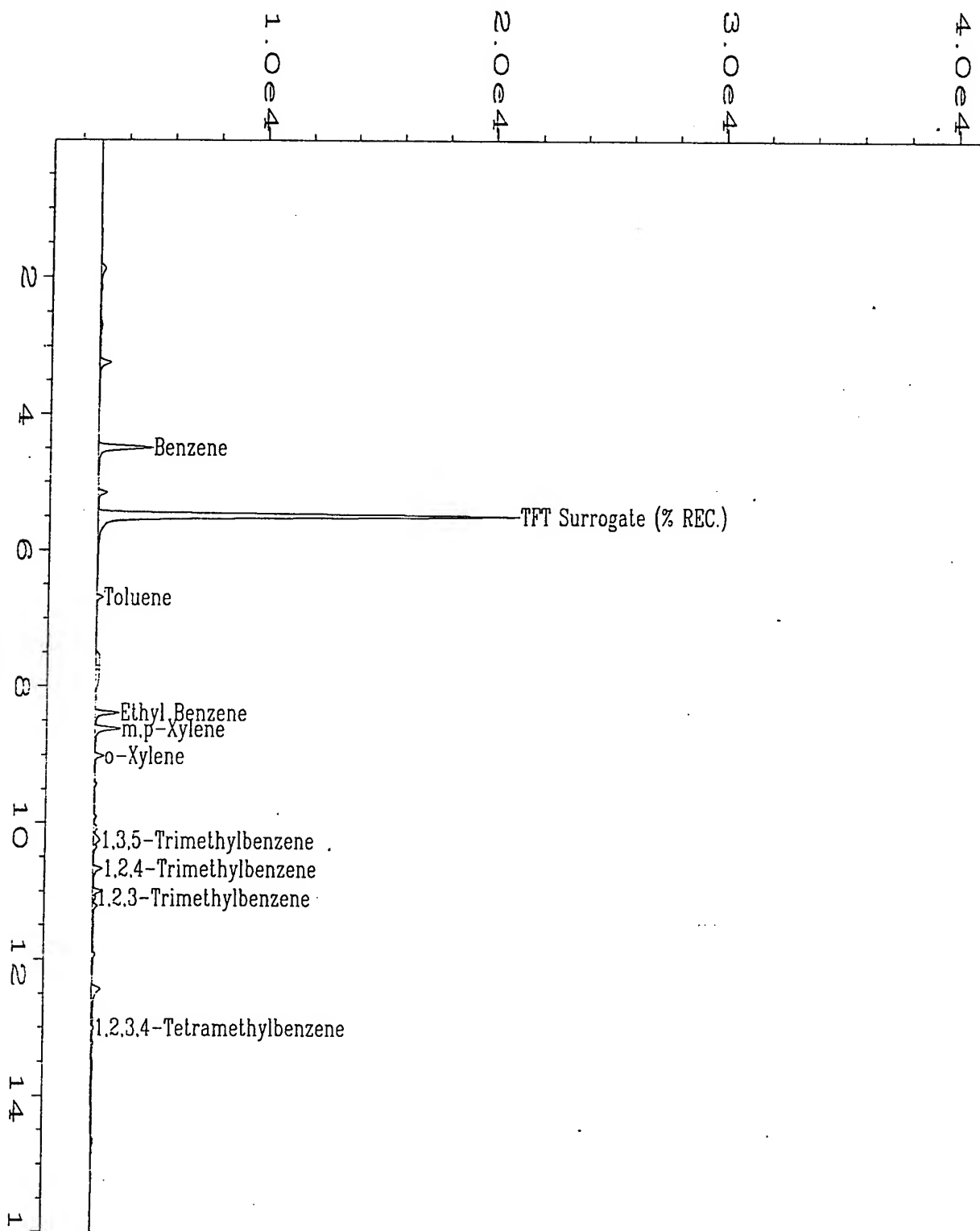
NA = Not Available/Not Applicable.

*K. Cone*

Analyst

*AmCelle*

Approved



|                    |                                       |                   |               |
|--------------------|---------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\031R0101.D | Page Number       | : 1           |
| Operator           | : T.Lockwood                          | Vial Number       | : 31          |
| Instrument         | : BTEX2                               | Injection Number  | : 1           |
| Sample Name        | : X05933;100;0.05                     | Sequence Line     | : 1           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20421.MTH |
| Acquired on        | : 22 Apr 95 03:53 AM                  | Analysis Method   | : BX20421.MTH |
| Report Created on  | : 22 Apr 95 04:09 AM                  | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                  | ISTD Amount       | :             |
| Multiplier         | : 100                                 |                   |               |
| Sample Info        | : 95-1264; MW-3; 0.050 ML WATER       |                   |               |

Evergreen Analytical, Inc.  
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BTEX Matrix Spike/Matrix Spike Duplicate Data Report

|                   |           |                    |                  |
|-------------------|-----------|--------------------|------------------|
| Client Sample No. | : MW-5    | Client Project No. | : 722450.2602    |
| Lab Sample No.    | : X05931  | Lab Project No.    | : 95-1264        |
| Date Sampled      | : 4/18/95 | EPA Method No.     | : 602            |
| Date Received     | : 4/18/95 | Matrix             | : WATER          |
| Date Prepared     | : 4/21/95 | Lab File Number(s) | : BX20421024,025 |
| Date Analyzed     | : 4/21/95 | Method Blank       | : MB2042195      |
|                   |           | Dilution Factor    | : 1              |

| Compound      | Spike Added (ug/L) | Sample Concentration (ug/L) | MS Concentration (ug/L) | MS %REC | QC Limits %REC |
|---------------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Benzene       | 20.0               | **                          | **                      | **      | 50-150         |
| Toluene       | 20.0               | 4.6                         | 22.8                    | 91.0    | 50-148         |
| Ethyl Benzene | 20.0               | 4.0                         | 23.0                    | 95.0    | 50-150         |
| m,p-Xylene    | 40.0               | 75.0                        | 109.3                   | 85.8    | 50-150         |
| o-Xylene      | 20.0               | 112.1 E **                  | 127.2 E                 | 75.5    | 50-150         |
| Chlorobenzene | 20.0               | 1.4                         | 21.1                    | 98.5    | 55-135         |
| 1,3,5-TMB     | 20.0               | 2.2                         | 21.0                    | 94.0    | 50-150         |
| 1,2,4-TMB     | 20.0               | 76.9 E **                   | 93.6 E                  | 83.5    | 50-150         |
| 1,2,3-TMB     | 20.0               | 36.8                        | 55.0                    | 91.0    | 50-150         |
| 1,2,3,4-TeMB  | 20.0               | 17.5                        | 37.3                    | 99.0    | 50-150         |

| Compound      | Spike Added (ug/L) | MSD Concentration (ug/L) | MSD %REC | RPD    | QC Limits |        |
|---------------|--------------------|--------------------------|----------|--------|-----------|--------|
|               |                    |                          |          |        | RPD       | %REC   |
| Benzene       | 20.0               | **                       | **       | **     | 25        | 50-150 |
| Toluene       | 20.0               | 22.1                     | 87.5     | 3.9    | 25        | 50-148 |
| Ethyl Benzene | 20.0               | 22.3                     | 91.5     | 3.8    | 25        | 50-150 |
| m,p-Xylene    | 40.0               | 105.3                    | 75.8     | 12.4   | 25        | 50-150 |
| o-Xylene      | 20.0               | 123.1 E **               | 55.0     | 30.6 * | 25        | 50-150 |
| Chlorobenzene | 20.0               | 22.8                     | 107.0    | 8.3    | 25        | 55-135 |
| 1,3,5-TMB     | 20.0               | 20.6                     | 92.0     | 2.2    | 25        | 50-150 |
| 1,2,4-TMB     | 20.0               | 91.1 E **                | 71.0     | 16.2   | 25        | 50-150 |
| 1,2,3-TMB     | 20.0               | 54.4                     | 88.0     | 3.4    | 25        | 50-150 |
| 1,2,3,4-TeMB  | 20.0               | 38.4                     | 104.5    | 5.4    | 25        | 50-150 |

\* = Values outside of QC limits.

RPD: 1 out of (9) outside limits.  
Spike Recovery: 0 out of (18) outside limits.

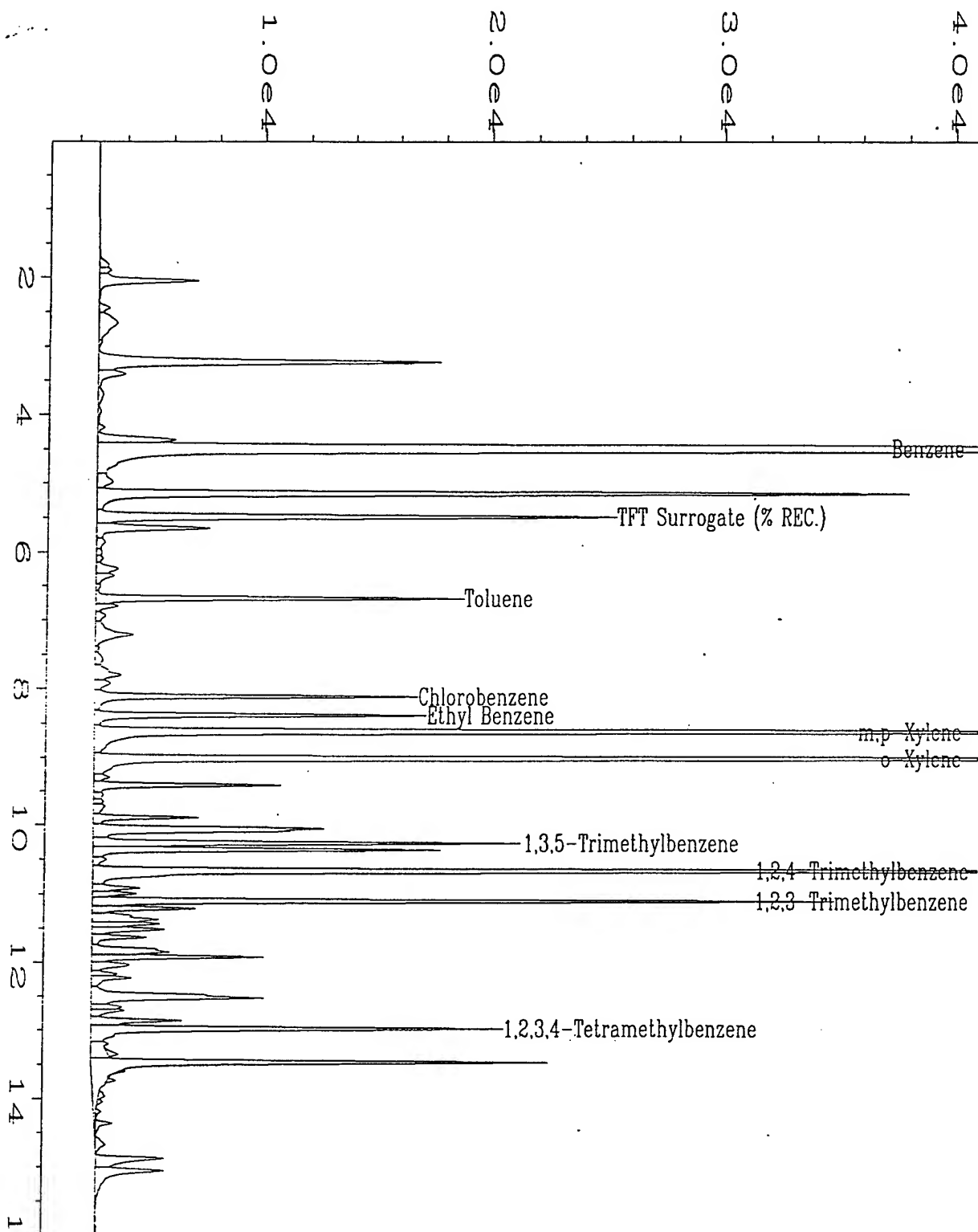
Comments: E = The benzene, o-xylene, and 1,2,4-Trimethylbenzene results are off-scale.  
The o-xylene RPD is out for this set of MS/MSD probably due to the off-scaling. \*\* See DF-12.5 for these compounds.

Analyst

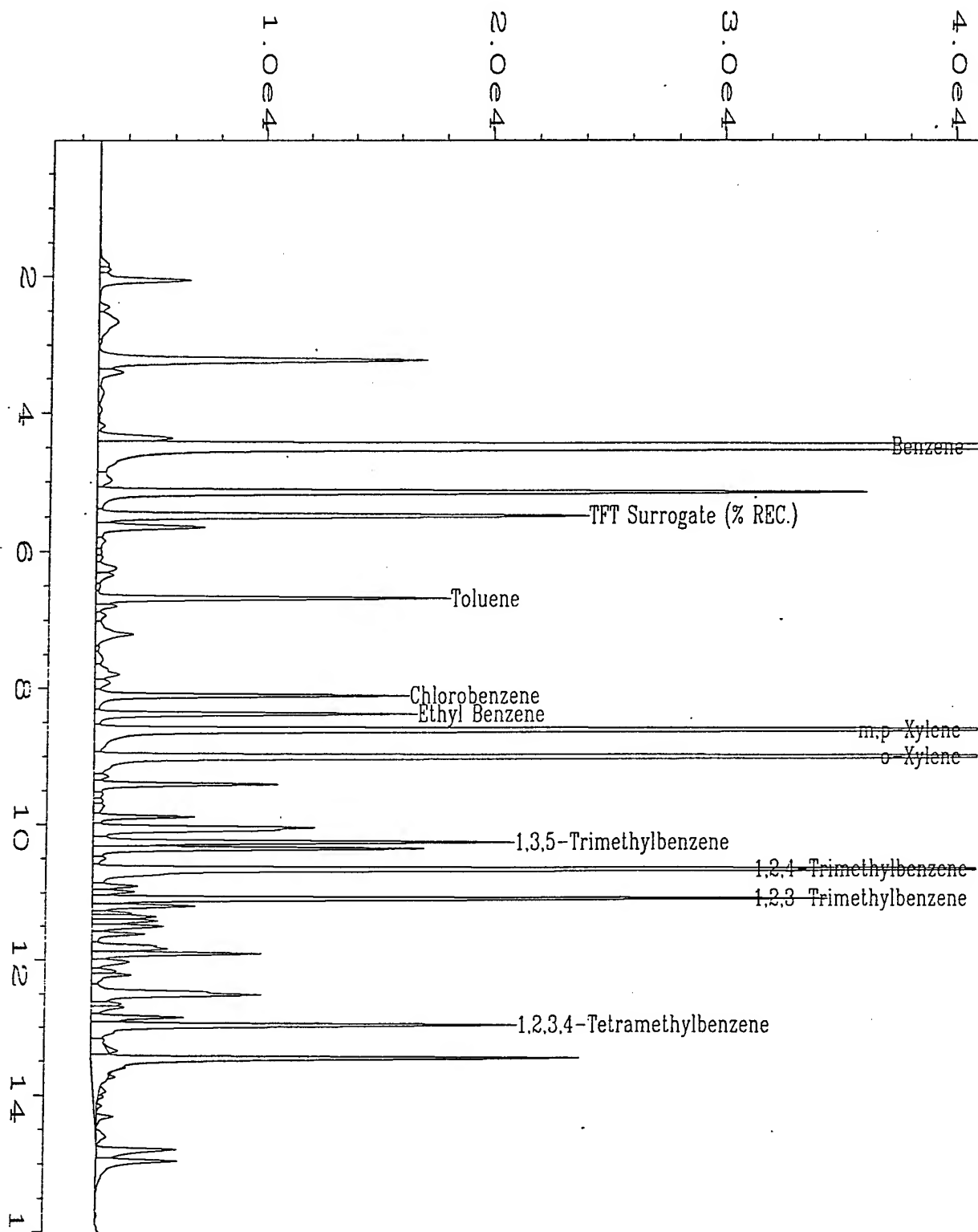
*K. Cone*

Approved

MS91264B.XLS



|                    |   |                   |               |
|--------------------|---|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\024R0101.D       | Page Number       | : 1           |
| Operator           | : T.Lockwood                                | Vial Number       | : 24          |
| Instrument         | : BTEX2                                     | Injection Number  | : 1           |
| Sample Name        | : X05931MS;1;5                              | Sequence Line     | : 1           |
| Run Time Bar Code: |   | Instrument Method | : BX20421.MTH |
| Acquired on        | : 21 Apr 95 11:41 PM                        | Analysis Method   | : BX20421.MTH |
| Report Created on  | : 21 Apr 95 11:57 PM                        | Sample Amount     | : 0           |
| Last Recalib on    | : 21 APR 95 02:28 PM                        | ISTD Amount       | :             |
| Multiplier         | : 1   |                   |               |
| Sample Info        | : 95-1264; MW-12D; 5 ML WATER; 20 PPB SPIKE |                   |               |



|                    |   |                   |             |
|--------------------|---|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20421\025R0101.D       | Page Number       | : 1         |
| Operator           | : T.Lockwood                                | Vial Number       | : 25        |
| Instrument         | : BTEX2                                     | Injection Number  | : 1         |
| Sample Name        | : X05931MSD;1;5                             | Sequence Line     | : 1         |
| Run Time Bar Code: |   | Instrument Method | : BX20421.M |
| Acquired on        | : 22 Apr 95 00:17 AM                        | Analysis Method   | : BX20421.M |
| Report Created on: | : 22 Apr 95 00:33 AM                        | Sample Amount     | : 0         |
| Last Recalib on    | : 21 APR 95 02:28 PM                        | ISTD Amount       | :           |
| Multiplier         | : 1   |                   |             |
| Sample Info        | : 95-1264; MW-12D; 5 ML WATER; 20 PPB SPIKE |                   |             |

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Matrix Spike/Matrix Spike Duplicate Data Report

|                   |           |                    |                  |
|-------------------|-----------|--------------------|------------------|
| Client Sample No. | : MW-5    | Client Project No. | : 722450.2602    |
| Lab Sample No.    | : X05931  | Lab Project No.    | : 95-1264        |
| Date Sampled      | : 4/18/95 | EPA Method No.     | : 602            |
| Date Received     | : 4/18/95 | Matrix             | : WATER          |
| Date Prepared     | : 4/24/95 | Lab File Number(s) | : BX20424013,014 |
| Date Analyzed     | : 4/25/95 | Method Blank       | : MB2042495      |
|                   |           | Dilution Factor    | : 12.5           |

| Compound      | Spike Added (ug/L) | Sample Concentration (ug/L) | MS Concentration (ug/L) | MS %REC | QC Limits %REC |
|---------------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Benzene       | 250.0              | 239.2                       | 398.3                   | 63.6    | 50-150         |
| Toluene       | 250.0              | 6.0                         | 193.7                   | 75.1    | 50-148         |
| Ethyl Benzene | 250.0              | 0.0                         | 194.2                   | 77.7    | 50-150         |
| m,p-Xylene    | 500.0              | 39.5                        | 409.8                   | 74.1    | 50-150         |
| o-Xylene      | 250.0              | 55.4                        | 218.6                   | 65.3    | 50-150         |
| Chlorobenzene | 250.0              | 0.0                         | 190.8                   | 65.3    | 55-135         |
| 1,3,5-TMB     | NA                 | NA                          | NA                      | NA      | 50-150         |
| 1,2,4-TMB     | 250.0              | 19.7                        | 191.2                   | 68.6    | 50-150         |
| 1,2,3-TMB     | NA                 | NA                          | NA                      | NA      | 50-150         |
| 1,2,3,4-TeMB  | NA                 | NA                          | NA                      | NA      | 50-150         |

| Compound      | Spike Added (ug/L) | MSD Concentration (ug/L) | MSD %REC | RPD  | QC Limits |        |
|---------------|--------------------|--------------------------|----------|------|-----------|--------|
|               |                    |                          |          |      | RPD       | %REC   |
| Benzene       | 250.0              | 398.1                    | 63.6     | 0.1  | 25        | 50-150 |
| Toluene       | 250.0              | 192.6                    | 74.6     | 0.6  | 25        | 50-148 |
| Ethyl Benzene | 250.0              | 191.0                    | 76.4     | 1.7  | 25        | 50-150 |
| m,p-Xylene    | 500.0              | 386.6                    | 69.4     | 6.5  | 25        | 50-150 |
| o-Xylene      | 250.0              | 244.8                    | 75.8     | 14.9 | 25        | 50-150 |
| Chlorobenzene | 250.0              | 186.1                    | 74.4     | 2.5  | 25        | 55-135 |
| 1,3,5-TMB     | NA                 | NA                       | NA       | NA   | 25        | 50-150 |
| 1,2,4-TMB     | 250.0              | 155.2                    | 54.2     | 23.5 | 25        | 50-150 |
| 1,2,3-TMB     | NA                 | NA                       | NA       | NA   | 25        | 50-150 |
| 1,2,3,4-TeMB  | NA                 | NA                       | NA       | NA   | 25        | 50-150 |

\* = Values outside of QC limits.

RPD: 0 out of (7) outside limits.  
Spike Recovery: 0 out of (14) outside limits.

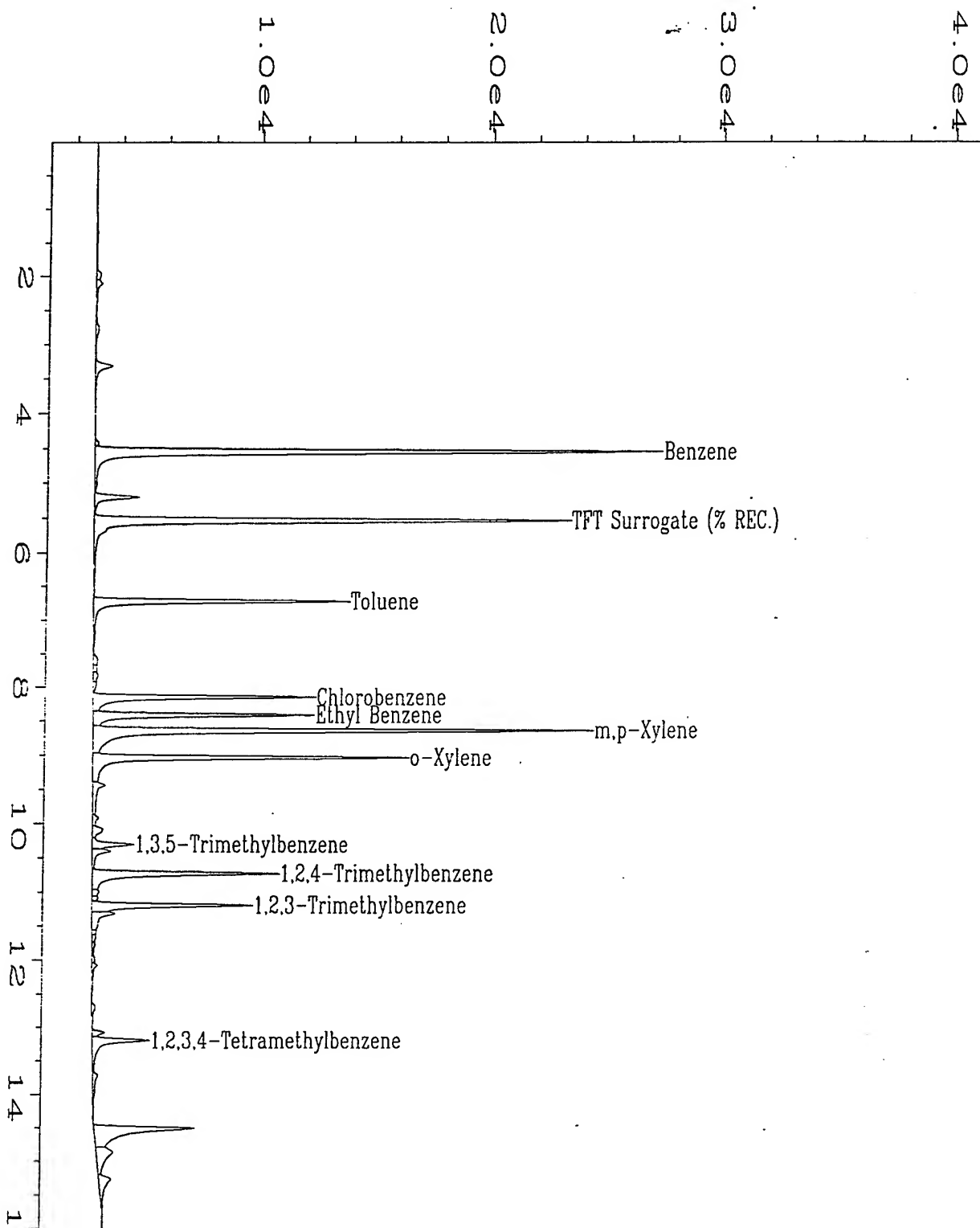
Comments:

Analyst

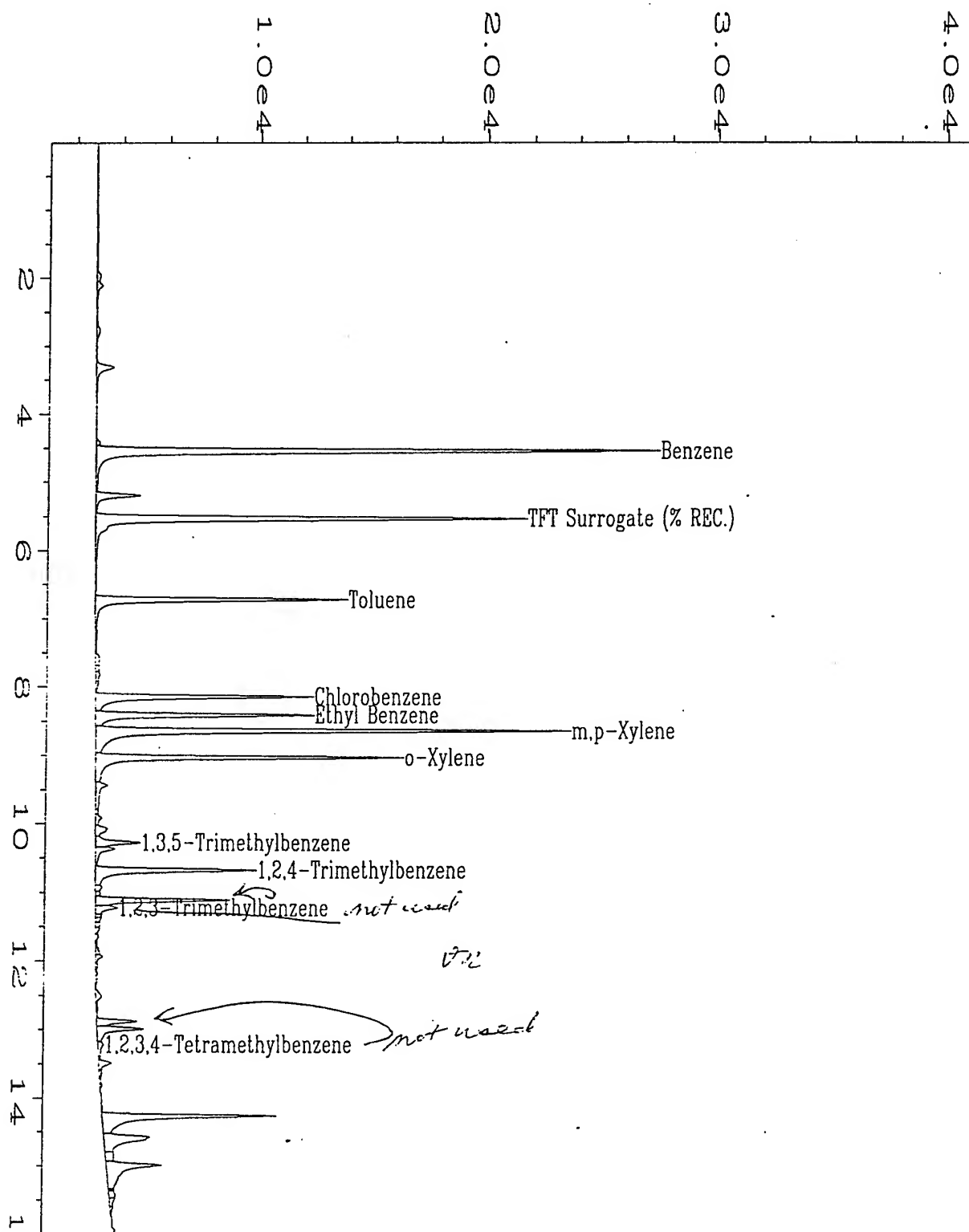
*K. Cone*

Approved

MS951264.XLS



|                    |                                       |                    |                          |
|--------------------|---------------------------------------|--------------------|--------------------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\013R0901.D | Page Number        | : 1                      |
| Operator           | : T.Lockwood                          | Vial Number        | : 13                     |
| Instrument         | : BTEX2                               | Injection Number   | : 1                      |
| Sample Name        | : X05931MS;12.5;.4                    | Sequence Line      | : 9                      |
| Run Time Bar Code: |                                       | Instrument Method: | BX20424.METHOD           |
| Acquired on        | : 25 Apr 95 03:42 AM                  | Analysis Method    | : BX20424.METHOD         |
| Port Created on:   | 25 Apr 95 11:14 AM                    | Sample Amount      | : 0                      |
| Last Recalib on    | : 25 APR 95 10:43 AM                  | ISTD Amount        | :                        |
| Multiplier         | : 12.5                                | Client#:           | MW-5(+BTEX MS/MSD) WATER |
| Sample Info        | : Project#: 95-1264                   |                    |                          |
|                    | 20ppb STD REF #1656                   |                    |                          |



|                    |                                       |                   |                            |
|--------------------|---------------------------------------|-------------------|----------------------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\014R0901.D | Page Number       | : 1                        |
| Operator           | : T.Lockwood                          | Vial Number       | : 14                       |
| Instrument         | : BTEX2                               | Injection Number  | : 1                        |
| Sample Name        | : X05931MSD12.5;.4                    | Sequence Line     | : 9                        |
| Run Time Bar Code: |                                       | Instrument Method | : BX20424.MTH              |
| Acquired on        | : 25 Apr 95 04:21 AM                  | Analysis Method   | : BX20424.MTH              |
| Report Created on  | : 25 Apr 95 11:14 AM                  | Sample Amount     | : 0                        |
| Last Recalib on    | : 25 APR 95 10:43 AM                  | ISTD Amount       | :                          |
| Multiplier         | : 12.5                                | Client#           | : MW-5(+BTEX MS/MSD) WATER |
| Sample Info        | : Project#: 95-1264                   |                   |                            |
|                    | : 20ppb STD REF #1656                 |                   |                            |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |              |
|-------------------------|-------------|-----------------|--------------|
| LCS Number              | : LCS042195 | Dilution Factor | : 1.00       |
| Date Extracted/Prepared | : 4/21/95   | Method          | : 602        |
| Date Analyzed           | : 4/21/95   | Matrix          | : Water      |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX20421009 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 17.9                   | 89.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 18.3                   | 91.5                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 18.8                   | 94.0                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 18.7                   | 93.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 19.6                   | 98.0                 | 75.0-114.0*         |
| o-Xylene  | 106-42-3   |                        |                      |                     |
|   | 95-47-6    | 18.8                   | 94.0                 | 64.0-119.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 18.7                   | 93.5                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 19.6                   | 98.0                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 18.5                   | 92.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 100%                   | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

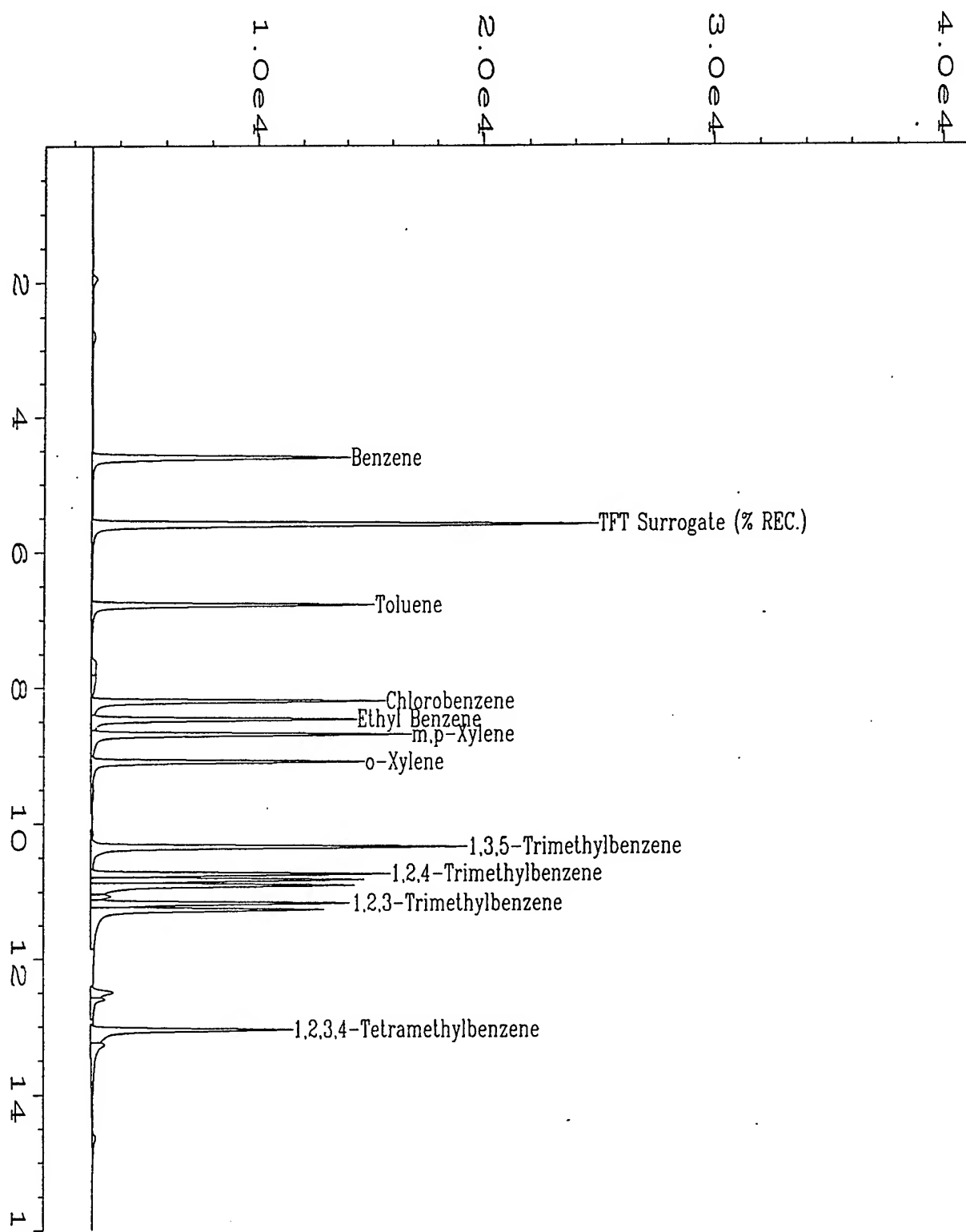
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

K. Cone  
Analyst

P. McCall  
Approved



Data File Name : D:\2\DATA\BX20421\009R0101.D  
 Operator : T.Lockwood  
 Instrument : BTEX2  
 Sample Name : LCS042195  
 Run Time Bar Code:  
 Started on : 21 Apr 95 02:25 PM  
 Report Created on: 01 May 95 03:27 PM  
 Last Recalib on : 21 APR 95 02:28 PM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 9  
 Injection Number : 1  
 Sequence Line : 1  
 Instrument Method: BX20421.MTH  
 Analysis Method : BX20421.MTH  
 Sample Amount : 0  
 ISTD Amount :

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |              |
|-------------------------|-------------|-----------------|--------------|
| LCS Number              | : LCS042495 | Dilution Factor | : 1.00       |
| Date Extracted/Prepared | : 4/24/95   | Method          | : 602        |
| Date Analyzed           | : 4/25/95   | Matrix          | : Water      |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX20424009 |

| Compound Name   | Cas Number          | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|---------------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2             | 14.5                   | 72.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3            | 15.4                   | 77.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7            | 15.9                   | 79.5                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4            | 16.0                   | 80.0                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3            | 17.2                   | 86.0                 | 75.0-114.0*         |
| o-Xylene  | 106-42-3<br>95-47-6 | 13.6                   | 68.0                 | 64.0-117.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8            | 16.3                   | 81.5                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6             | 14.7                   | 73.5                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8            | 26.0                   | 130.0                | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3            | NA                     | NA                   | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |                     | 99%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

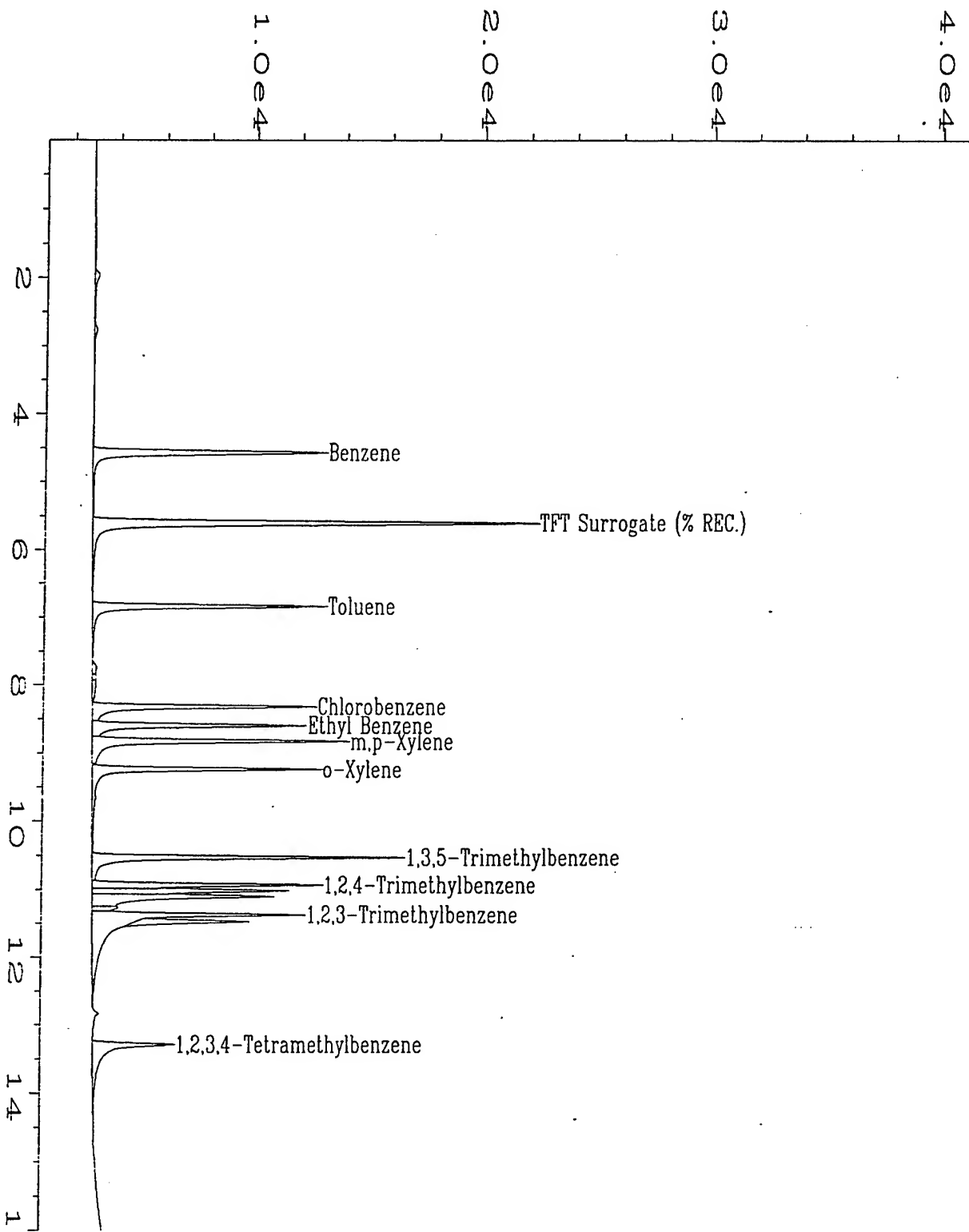
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

K. Cone  
Analyst

AmcClell  
Approved



user modified

|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20424\009R0901.D | Page Number        | : 1           |
| Operator           | : T.Lockwood                          | Vial Number        | : 9           |
| Instrument         | : BTEX2                               | Injection Number   | : 1           |
| Sample Name        | : LCS042495                           | Sequence Line      | : 9           |
| Run Time Bar Code: |                                       | Instrument Method: | BX20424.MTH   |
| Acquired on        | : 25 Apr 95 01:07 AM                  | Analysis Method    | : BX20424.MTH |
| Report Created on: | 25 Apr 95 11:00 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 25 Apr 95 10:43 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

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(303) 425-6021

BTEX Data Report  
Laboratory Control Sample (LCS)

|                         |             |                 |             |
|-------------------------|-------------|-----------------|-------------|
| LCS Number              | : LCS042595 | Dilution Factor | : 1.00      |
| Date Extracted/Prepared | : 4/25/95   | Method          | : 602       |
| Date Analyzed           | : 4/25/95   | Matrix          | : Water     |
| Spike Amount (ug/L)     | : 20.0      | Lab File No.    | : BX2042510 |

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 16.9                   | 84.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 17.0                   | 85.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 17.7                   | 88.5                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 17.9                   | 89.5                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 19.5                   | 97.5                 | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 17.3                   | 86.5                 | 64.0-111.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 19.8                   | 99.0                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 19.0                   | 95.0                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 18.9                   | 94.5                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 22.4                   | 112.0                | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 96%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

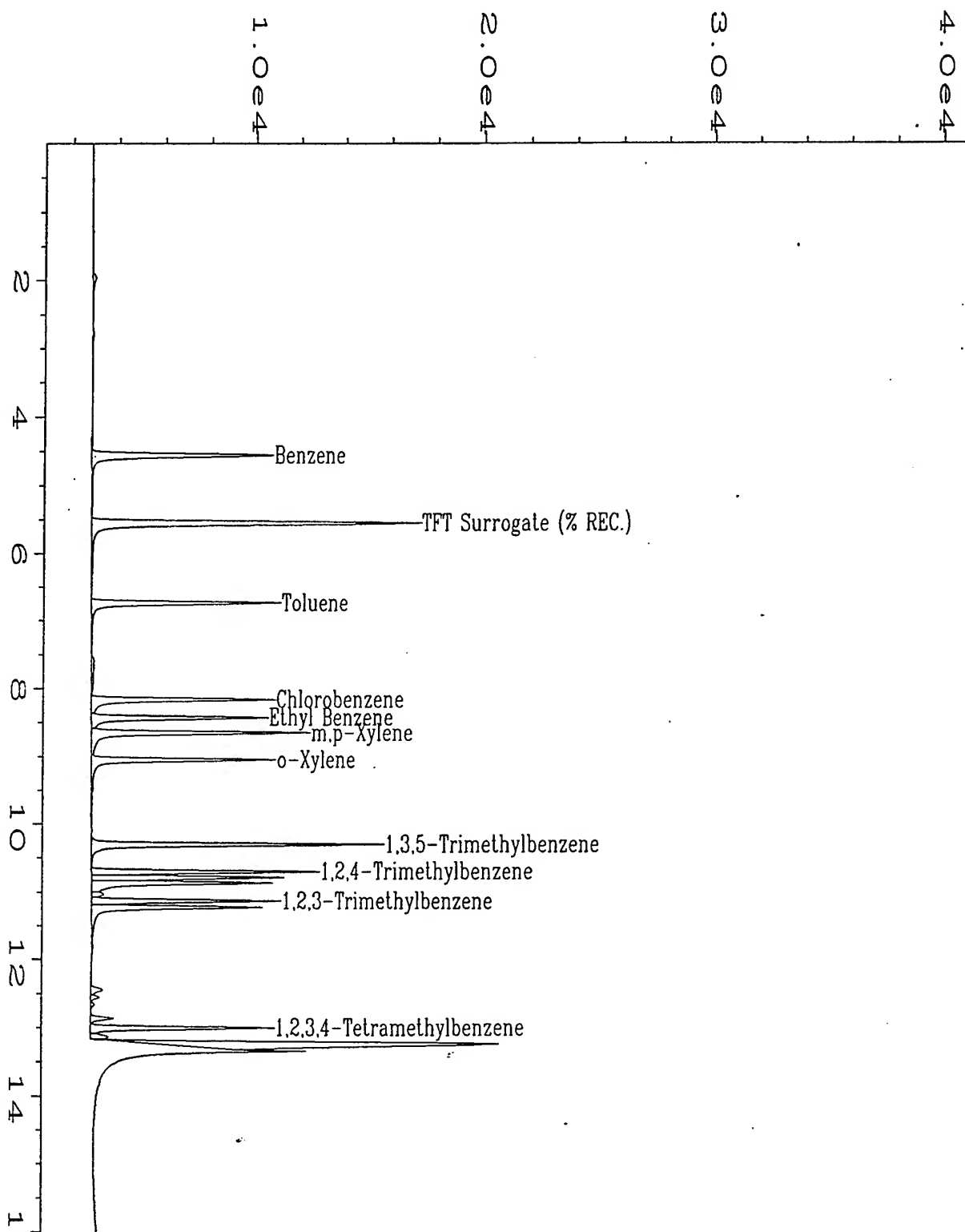
B = Compound found in blank and sample. Compare blank and sample data.

J = Indicates an estimated value when the compound is detected, but is below the Reporting Limit (RL).

NA = Not available/Not analyzed.

K. Cone  
Analyst

P. McClellan  
Approved  
LCS20425.XLS; 5/1/95



Data File Name : D:\2\DATA\BX20425\010R0101.D  
 Operator : S.W. Tyson  
 Instrument : BTEX2  
 Sample Name : LCS042595  
 Run Time Bar Code:  
 Required on : 25 Apr 95 02:23 PM  
 Report Created on: 01 May 95 02:51 PM  
 Last Recalib on : 26 APR 95 09:49 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 10  
 Injection Number : 1  
 Sequence Line : 1  
 Instrument Method: BX20425.MTH  
 Analysis Method : BX20425.MTH  
 Sample Amount : 0  
 ISTD Amount :

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

EPA 602/8020 Data Report  
Laboratory Control Sample (LCS)

LCS Number : LCS2050295 Dilution Factor : 1.00  
Date Extracted/Prepared : 5/2/95 Method : 602  
Date Analyzed : 5/2/95 Matrix : Water  
Spike Amount (ug/L) : 20.0 Lab File No. : BX2050212

| Compound Name   | Cas Number | LCS Concentration ug/L | LCS % Recovery       | QC Limit % Recovery |
|---|------------|------------------------|----------------------|---------------------|
| Benzene   | 71-43-2    | 14.9                   | 74.5                 | 71.0-119.0*         |
| Toluene   | 108-88-3   | 15.6                   | 78.0                 | 73.0-111.0*         |
| Chlorobenzene   | 108-90-7   | 16.7                   | 83.5                 | 64.0-119.0*         |
| Ethyl Benzene   | 100-41-4   | 16.4                   | 82.0                 | 75.0-114.0*         |
| m,p-Xylene  | 108-38-3   | 17.0                   | 85.0                 | 75.0-114.0*         |
|   | 106-42-3   |                        |                      |                     |
| o-Xylene  | 95-47-6    | 15.6                   | 78.0                 | 64.0-111.0*         |
| 1,3,5-Trimethylbenzene  | 108-67-8   | 16.8                   | 84.0                 | 50.0-150.0          |
| 1,2,4-Trimethylbenzene  | 95-63-6    | 17.8                   | 89.0                 | 50.0-150.0          |
| 1,2,3-Trimethylbenzene  | 526-73-8   | 16.7                   | 83.5                 | 50.0-150.0          |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3   | 18.9                   | 94.5                 | 50.0-150.0          |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |            | 90%                    | 70%-130% (QC limits) |                     |

\* = Limits established 4/3/95 KSC

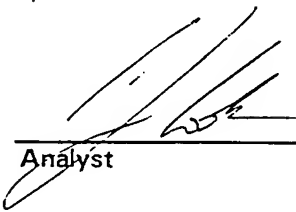
QUALIFIERS:

E = Extrapolated value

U = Compound analyzed for, but not detected.

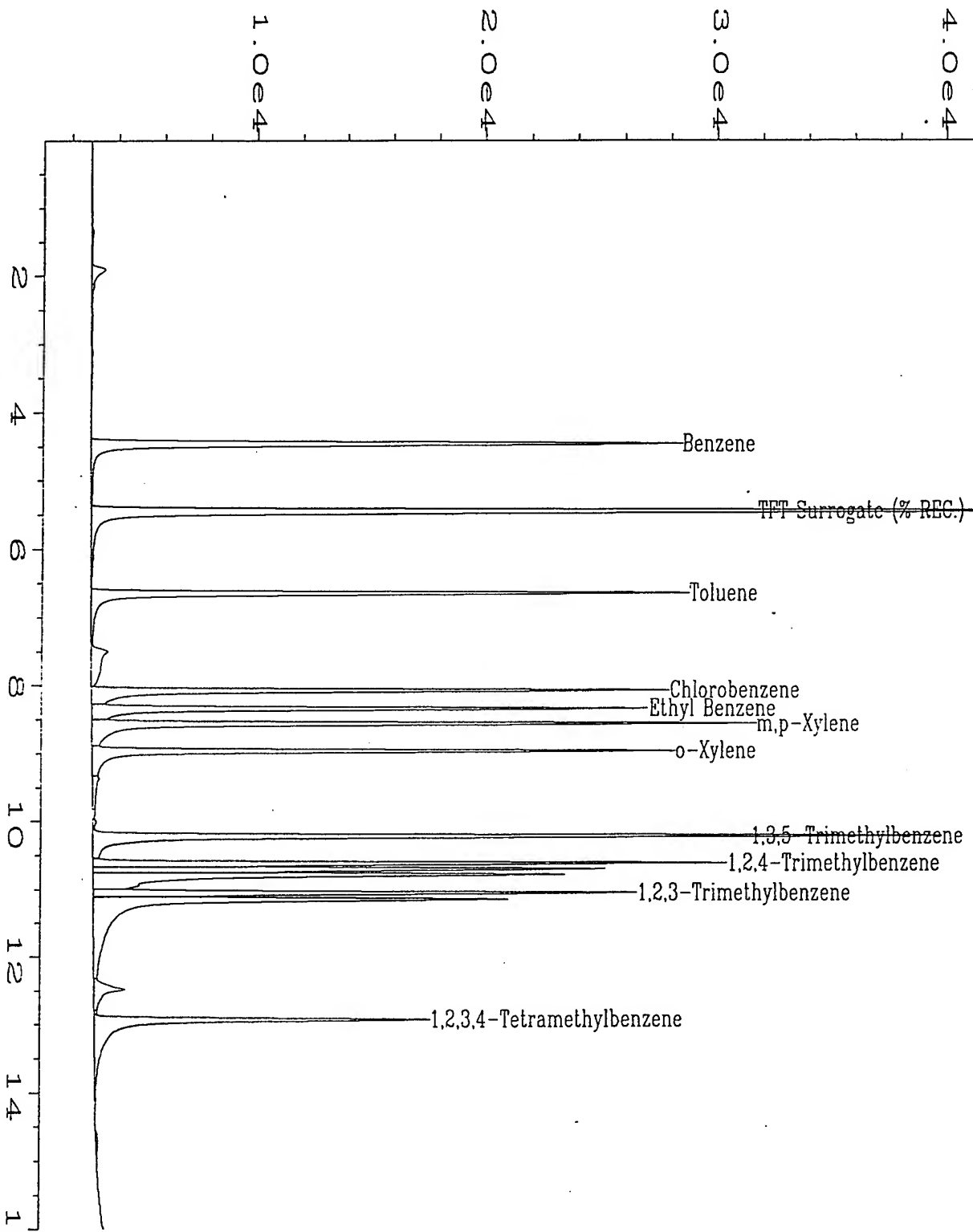
B = Compound found in blank and sample. Compare blank and sample data.

NA = Not available/Not analyzed.

  
Analyst

  
Approved

LCSTMB1.XLS; 5/9/95



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20502\012R1001.D | Page Number       | : 1            |
| Operator           | : C.J. Cook                           | Vial Number       | : 12           |
| Instrument         | : BTEX2                               | Injection Number  | : 1            |
| Sample Name        | : LCS2050295                          | Sequence Line     | : 10           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20502.MTH  |
| Acquired on        | : 02 May 95 05:03 PM                  | Analysis Method   | : BX20502A.MTH |
| Report Created on: | : 03 May 95 02:55 PM                  | Sample Amount     | : 0            |
| Recalib on         | : 03 MAY 95 02:37 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |
| Sample Info        | : REF # 1667                          |                   |                |

EVERGREEN ANALYTICAL, INC.  
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(303) 425-6021

EPA 602/8020 Data Report  
Laboratory Control Sample (LCS)

|                         |              |                 |             |
|-------------------------|--------------|-----------------|-------------|
| LCS Number              | : LCS2050395 | Dilution Factor | : 1.00      |
| Date Extracted/Prepared | : 5/3/95     | Method          | : 602       |
| Date Analyzed           | : 5/3/95     | Matrix          | : Water     |
| Spike Amount (ug/L)     | : 20.0       | Lab File No.    | : BX2050310 |

| Compound Name   | Cas<br>Number | LCS<br>Concentration<br>ug/L | LCS<br>%<br>Recovery | QC Limit<br>% Recovery |
|---|---------------|------------------------------|----------------------|------------------------|
| Benzene   | 71-43-2       | 17.2                         | 86.0                 | 71.0-119.0*            |
| Toluene   | 108-88-3      | 18.1                         | 90.5                 | 73.0-111.0*            |
| Chlorobenzene   | 108-90-7      | 19.5                         | 97.5                 | 64.0-119.0*            |
| Ethyl Benzene   | 100-41-4      | 18.2                         | 91.0                 | 75.0-114.0*            |
| m,p-Xylene  | 108-38-3      | 18.2                         | 91.0                 | 75.0-114.0*            |
|   | 106-42-3      |                              |                      |                        |
| o-Xylene  | 95-47-6       | 16.8                         | 84.0                 | 64.0-119.0*            |
| 1,3,5-Trimethylbenzene  | 108-67-8      | 20.4                         | 102                  | 50.0-150.0             |
| 1,2,4-Trimethylbenzene  | 95-63-6       | 18.4                         | 92.0                 | 50.0-150.0             |
| 1,2,3-Trimethylbenzene  | 526-73-8      | 19.6                         | 98.0                 | 50.0-150.0             |
| 1,2,3,4-Tetramethylbenzene                                      | 488-23-3      | 18.1                         | 90.5                 | 50.0-150.0             |
| Surrogate Recovery ( $\alpha,\alpha,\alpha$ -Trifluorotoluene): |               | 98%                          | 70%-130% (QC limits) |                        |

\* = Limits established 4/3/95 KSC

QUALIFIERS:

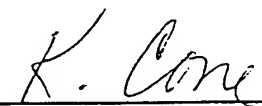
E = Extrapolated value

U = Compound analyzed for, but not detected.

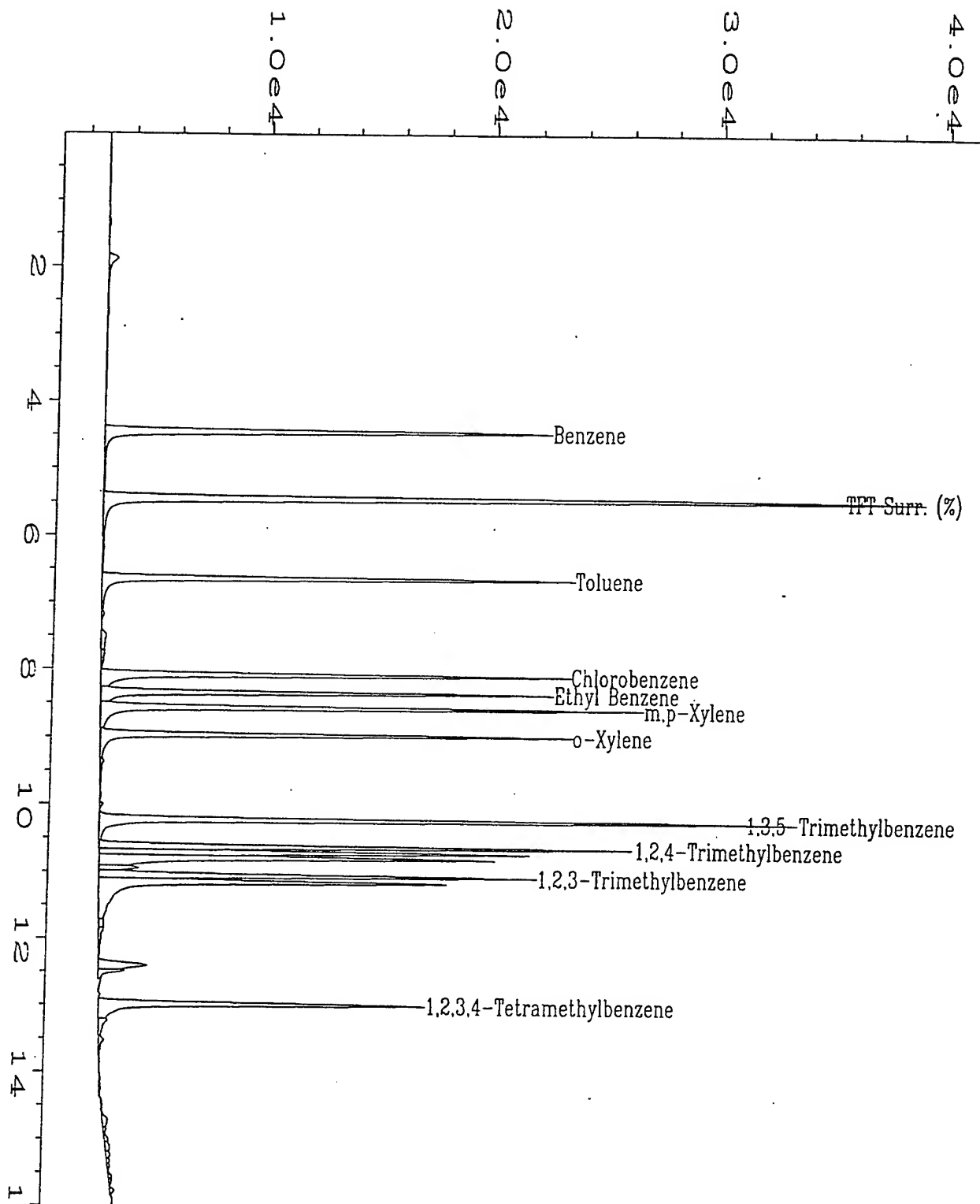
B = Compound found in blank and sample. Compare blank and sample data.

NA = Not available/Not analyzed.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved

LCS20503.XLS; 5/12/95



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\BX20503\010R1001.D | Page Number       | : 1            |
| Operator           | : C.J. Cook                           | Vial Number       | : 10           |
| Instrument         | : BTEX2                               | Injection Number  | : 1            |
| Sample Name        | : LCS2050395                          | Sequence Line     | : 10           |
| Run Time Bar Code: |                                       | Instrument Method | : BX20503.MTH  |
| Acquired on        | : 03 May 95 04:25 PM                  | Analysis Method   | : BX20503A.MTH |
| Report Created on  | : 04 May 95 08:55 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 04 MAY 95 08:47 AM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |
| Sample Info        | : REF # 1667                          |                   |                |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |               |
|-------------------------|------------|--------------------|---------------|
| Client Sample Number    | : CPT-18   | Client I.D.        | : 722450.2602 |
| Lab Sample Number       | : X05923   |                    | : SEYMORE J   |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264     |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00        |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624         |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER       |
|                         |            | Lab File No.       | : >L0488      |
|                         |            | Method Blank No.   | : RB050195    |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 770 E         | 0.5                         |
| Toluene                             | 108-88-3   | 11            | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | 96            | 0.5                         |
| Total Xylenes                       | 1330-20-7  | 42            | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 4             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 13            | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 5             | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 25            | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 8             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | 28            | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 90% |
| Toluene-d8            | 99% |
| Bromofluorobenzene    | 97% |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent w  
E = Compound is detected but concentration is outside of calibration limit  
NA = Not applicable or not available.

Analyst

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VOLATILE ORGANICS ANALYSIS DATA

Client Sample Number : CPT-18 Client I.D. : 722450.2602 /  
Lab Sample Number : X05923 SEYMORE JOHNSC  
Date Sampled : 04/18/95 Lab Project No. : 95-1264  
Date Received : 04/19/95 Effective Dilution : 1.00  
Date Extracted/Prepared : 05/01/95 Method : 624  
Date Analyzed : 05/01/95 Matrix : WATER  
Lab File No. : >L0488  
Method Blank No. : RB050195

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 2 B           | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | 15            | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | 19            | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | 30            | 1.0                         |
| Chloroform                | 67-66-3    | U             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | 16            | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | 6             | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | 84            | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | 770 E         | 0.5                         |
| Bromochloromethane        | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | 11            | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | 96            | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | 42            | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |     | QC Limits |
|-----------------------|-----|-----------|
| 1,2 Dichloroethane-d4 | 90% | (83-112)  |
| Toluene-d8            | 99% | (93-104)  |
| Bromofluorobenzene    | 97% | (87-105)  |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |               |
|-------------------------|------------|--------------------|---------------|
| Client Sample Number    | : CPT-18   | Client I.D.        | : 722450.2602 |
| Lab Sample Number       | : X05923   |                    | : SEYMORE     |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264     |
| Date Received           | : 04/19/95 | Effective Dilution | : 5.00        |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624         |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER       |
|                         |            | Lab File No.       | : >L0503      |
|                         |            | Method Blank No.   | : RB050295    |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 830           | 2.5                         |
| Toluene                             | 108-88-3   | 9             | 2.5                         |
| Ethyl Benzene                       | 100-41-4   | 98            | 2.5                         |
| Total Xylenes                       | 1330-20-7  | 46            | 2.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | U             | 2.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 13            | 2.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 6             | 2.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 25            | 5.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | U             | 5.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 5.0                         |
| Styrene                             | 100-42-5   | U             | 5.0                         |

ADDITIONAL COMPOUNDS

| Compound Name               | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-----------------------------|------------|---------------|-----------------------------|
| 1,1-dichlorodifluoromethane | 75-71-8    | U             | 5.0                         |
| Isopropyl ether             | 108-20-3   | 28            | 5.0                         |
| 1,2-Dibromoethane (EDB)     | 106-93-4   | U             | 5.0                         |
| 1,3-Dichlorobenzene         | 541-73-1   | U             | 5.0                         |
| 1,2-Dichlorobenzene         | 95-50-1    | U             | 5.0                         |
| 1,4-Dichlorobenzene         | 106-46-7   | U             | 5.0                         |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 96%  |
| Toluene-d8            | 102% |
| Bromofluorobenzene    | 97%  |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA  
Target Compound List

|                         |            |                    |                 |
|-------------------------|------------|--------------------|-----------------|
| Client Sample Number    | : CPT-18   | Client I.D.        | : 722450.2602 / |
| Lab Sample Number       | : X05923   |                    | SEYMORE JOHNSON |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264       |
| Date Received           | : 04/19/95 | Effective Dilution | : 5.00          |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624           |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER         |
|                         |            | Lab File No.       | : >L0503        |
|                         |            | Method Blank No.   | : RB050295      |

| Compound Name | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------|------------|---------------|-----------------------------|
| Benzene       | 71-43-2    | 830           | 2.5                         |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 96%  |
| Toluene-d8            | 102% |
| Bromofluorobenzene    | 97%  |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |             |
|-------------------------|------------|--------------------|-------------|
| Client Sample Number    | : MW-4     | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05926   |                    | : SEYMORE   |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264   |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00      |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624       |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER     |
|                         |            | Lab File No.       | : >L0489    |
|                         |            | Method Blank No.   | : RB050195  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | E             | 0.5                         |
| Toluene                             | 108-88-3   | E             | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | 930 E         | 0.5                         |
| Total Xylenes                       | 1330-20-7  | E             | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 250           | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 680 E         | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 320           | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 40            | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 14            | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | 3             | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 91% |
| Toluene-d8            | 93% |
| Bromofluorobenzene    | 96% |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
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E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
Target Compound List

|                         |            |                    |                   |
|-------------------------|------------|--------------------|-------------------|
| Client Sample Number    | : MW-4     | Client I.D.        | : 722450.2602 /   |
| Lab Sample Number       | : X05926   |                    | : SEYMORE JOHNSON |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264         |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00            |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624             |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER           |
|                         |            | Lab File No.       | : >L0489          |
|                         |            | Method Blank No.   | : RB050195        |

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 3 B           | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | 530 E         | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | 190 U         | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | 26 U          | 1.0                         |
| Chloroform                | 67-66-3    | U             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | 40 U          | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | E             | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | 460 E         | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | E             | 0.5                         |
| Bromochloromethane        | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | 3 E           | 1.0                         |
| Toluene                   | 108-88-3   | E             | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | 930 E         | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | E             | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 91% |
| Toluene-d8            | 93% |
| Bromofluorobenzene    | 96% |

QC Limits

{83-112}  
{93-104}  
{87-105}

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |             |
|-------------------------|------------|--------------------|-------------|
| Client Sample Number    | : MW-4     | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05926   |                    | : SEYMORE J |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264   |
| Date Received           | : 04/19/95 | Effective Dilution | : 10.00     |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624       |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER     |
|                         |            | Lab File No.       | : >L0504    |
|                         |            | Method Blank No.   | : RB050295  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 2,200         | 5.0                         |
| Toluene                             | 108-88-3   | 3,000         | 5.0                         |
| Ethyl Benzene                       | 100-41-4   | 1,100         | 5.0                         |
| Total Xylenes                       | 1330-20-7  | 6,600         | 5.0                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 69            | 5.0                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 770           | 5.0                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 330           | 5.0                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 47            | 10.0                        |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | U             | 10.0                        |
| Chlorobenzene                       | 108-90-7   | U             | 10.0                        |
| Styrene                             | 100-42-5   | U             | 10.0                        |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 10.0                        |
| Isopropyl ether         | 108-20-3   | U             | 10.0                        |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 10.0                        |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 10.0                        |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 10.0                        |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 10.0                        |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 96% |
| Toluene-d8            | 98% |
| Bromofluorobenzene    | 94% |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa-  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
Target Compound List

Client Sample Number : MW-4 Client I.D. : 722450.2602 /  
Lab Sample Number : X05926 SEYMORE JOHNSON  
Date Sampled : 04/18/95 Lab Project No. : 95-1264  
Date Received : 04/19/95 Effective Dilution : 10.00  
Date Extracted/Prepared : 05/02/95 Method : 624  
Date Analyzed : 05/02/95 Matrix : WATER  
Lab File No. : >L0504  
Method Blank No. : RB050295

| Compound Name         | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-----------------------|------------|---------------|-----------------------------|
| 1,1-Dichloroethene    | 75-35-4    | 760           | 10.0                        |
| 1,1,1-Trichloroethane | 71-55-6    | 3,800         | 5.0                         |
| Trichloroethene       | 79-01-6    | 520           | 10.0                        |
| Benzene               | 71-43-2    | 2,200         | 5.0                         |
| Toluene               | 108-88-3   | 3,000         | 5.0                         |
| Ethyl Benzene         | 100-41-4   | 1,100         | 5.0                         |
| Total Xylenes         | 1330-20-7  | 6,600         | 5.0                         |

Surrogate Recoveries:

1,2 Dichloroethane-d4 96%  
Toluene-d8 98%  
Bromofluorobenzene 94%

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |            |
|-------------------------|------------|--------------------|------------|
| Client Sample Number    | : MW-12D   | Client I.D.        | : 722450.2 |
| Lab Sample Number       | : X05928   |                    | : SEYMORE  |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264  |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00     |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624      |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER    |
|                         |            | Lab File No.       | : >L0490   |
|                         |            | Method Blank No.   | : RB050195 |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 140           | 0.5                         |
| Toluene                             | 108-88-3   | 44            | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | 14            | 0.5                         |
| Total Xylenes                       | 1330-20-7  | 85            | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 5             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 16            | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 7             | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 2             | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 1             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | 2             | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

QC Limits

|                       |     |          |
|-----------------------|-----|----------|
| 1,2 Dichloroethane-d4 | 97% | (83-112) |
| Toluene-d8            | 99% | (93-104) |
| Bromofluorobenzene    | 94% | (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA

|                         |            |                    |                  |
|-------------------------|------------|--------------------|------------------|
| Client Sample Number    | : MW-12D   | Client I.D.        | : 722450.2602 /  |
| Lab Sample Number       | : X05928   |                    | : SEYMORE JOHNSC |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264        |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00           |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624            |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER          |
|                         |            | Lab File No.       | : >L0490         |
|                         |            | Method Blank No.   | : RB050195       |

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 2 B           | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | 6             | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | 20            | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | 9             | 1.0                         |
| Chloroform                | 67-66-3    | U             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | 3             | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | 3             | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | 28            | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | 140           | 0.5                         |
| Dibromochloromethane      | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | 44            | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | 14            | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | 85            | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 97% |
| Toluene-d8            | 99% |
| Bromofluorobenzene    | 94% |

QC Limits

{83-112}  
{93-104}  
{87-105}

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |             |
|-------------------------|------------|--------------------|-------------|
| Client Sample Number    | : MW-5     | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05931   |                    | : SEYMORE   |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264   |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00      |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624       |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER     |
|                         |            | Lab File No.       | : >L0491    |
|                         |            | Method Blank No.   | : RB050195  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 380           | 0.5                         |
| Toluene                             | 108-88-3   | 5             | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | 4             | 0.5                         |
| Total Xylenes                       | 1330-20-7  | 200           | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 2             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 64            | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 32            | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 13            | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 4             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | 3             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | 8             | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 94% |
| Toluene-d8            | 99% |
| Bromofluorobenzene    | 96% |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent w.  
E = Compound is detected but concentration is outside of calibration limit.  
NA = Not applicable or not available.

Analyst

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4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA

|                         |            |                    |                   |
|-------------------------|------------|--------------------|-------------------|
| Client Sample Number    | : MW-5     | Client I.D.        | : 722450.2602 /   |
| Lab Sample Number       | : X05931   |                    | : SEYMORE JOHNSON |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264         |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00            |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624             |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER           |
|                         |            | Lab File No.       | : >L0491          |
|                         |            | Method Blank No.   | : RB050195        |

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 2 B           | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | 31            | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | 16            | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | 64            | 1.0                         |
| Chloroform                | 67-66-3    | 10 B          | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | 4             | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | 85            | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | 110           | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | 380           | 0.5                         |
| Dibromochloromethane      | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | 5             | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | 4             | 0.5                         |
| Styrene                   | 100-42-5   | 3             | 1.0                         |
| Total Xylenes             | 1330-20-7  | 200           | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 94% |
| Toluene-d8            | 99% |
| Bromofluorobenzene    | 96% |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |             |
|-------------------------|------------|--------------------|-------------|
| Client Sample Number    | : MW-8     | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05932   |                    | : SEYMORE   |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264   |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00      |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624       |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER     |
|                         |            | Lab File No.       | : >L0492    |
|                         |            | Method Blank No.   | : RB050195  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 440           | 0.5                         |
| Toluene                             | 108-88-3   | 6             | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | 230           | 0.5                         |
| Total Xylenes                       | 1330-20-7  | 16            | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 1             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 3             | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 2             | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 24            | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 2             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | 13            | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 98%  |
| Toluene-d8            | 100% |
| Bromofluorobenzene    | 97%  |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA

Target Compound List

|                         |            |                    |                 |
|-------------------------|------------|--------------------|-----------------|
| Client Sample Number    | : MW-8     | Client I.D.        | : 722450.2602 / |
| Lab Sample Number       | : X05932   |                    | SEYMORE JOHNSON |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264       |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00          |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624           |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER         |
|                         |            | Lab File No.       | : >L0492        |
|                         |            | Method Blank No.   | : RB050195      |

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 2 B           | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | 1             | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | U             | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | 44            | 1.0                         |
| Chloroform                | 67-66-3    | U             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | 9             | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | U             | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | 32            | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | 440           | 0.5                         |
| Dibromochloromethane      | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | 6             | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | 230           | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | 16            | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

QC Limits

|                       |      |          |
|-----------------------|------|----------|
| 1,2 Dichloroethane-d4 | 98%  | (83-112) |
| Toluene-d8            | 100% | (93-104) |
| Bromofluorobenzene    | 97%  | (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

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4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |            |
|-------------------------|------------|--------------------|------------|
| Client Sample Number    | : MW-3     | Client I.D.        | : 722450.2 |
| Lab Sample Number       | : X05933   |                    | : SEYMORE  |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264  |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00     |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624      |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER    |
|                         |            | Lab File No.       | : >L0493   |
|                         |            | Method Blank No.   | : RB050195 |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | 450           | 0.5                         |
| Toluene                             | 108-88-3   | 26            | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | 230           | 0.5                         |
| Total Xylenes                       | 1330-20-7  | 320           | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 46            | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 100           | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 29            | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 30            | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 19            | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | 4             | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

|                       |     | QC Limits |
|-----------------------|-----|-----------|
| 1,2 Dichloroethane-d4 | 99% | (83-112)  |
| Toluene-d8            | 98% | (93-104)  |
| Bromofluorobenzene    | 97% | (87-105)  |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA  
Target Compound List

|                         |            |                    |                 |
|-------------------------|------------|--------------------|-----------------|
| Client Sample Number    | : MW-3     | Client I.D.        | : 722450.2602 / |
| Lab Sample Number       | : X05933   |                    | SEYMORE JOHNSON |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264       |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00          |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624           |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER         |
|                         |            | Lab File No.       | : >L0493        |
|                         |            | Method Blank No.   | : RB050195      |

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 2 B           | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 10.0                        |
| Carbon Disulfide          | 75-15-0    | U             | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | 1             | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | U             | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | 300           | 1.0                         |
| Chloroform                | 67-66-3    | U             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | 4             | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | U             | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | U             | 2.0                         |
| Bromodichloromethane      | 75-27-4    | U             | 1.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | U             | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 2.0                         |
| Trichloroethene           | 79-01-6    | 160           | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | 450           | 0.5                         |
| Dibromochloromethane      | 124-48-1   | U             | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 5.0                         |
| Bromoform                 | 75-25-2    | U             | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 5.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 1.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | 26            | 0.5                         |
| Chlorobenzene             | 108-90-7   | U             | 1.0                         |
| Ethyl Benzene             | 100-41-4   | 230           | 0.5                         |
| Styrene                   | 100-42-5   | U             | 1.0                         |
| Total Xylenes             | 1330-20-7  | 320           | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 99% |
| Toluene-d8            | 98% |
| Bromofluorobenzene    | 97% |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

VOLATILE ORGANICS ANALYSIS DATA

METHOD BLANK REPORT

Method Blank Number : RB050195  
Date Extracted/Prepared : 05/01/95  
Date Analyzed : 05/01/95  
GC Confirmation and Additional Compounds : 722450.2  
Client I.D. : SEYMORE JOHN  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 624  
Lab File No. : >L0486

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | U             | 0.5                         |
| Toluene                             | 108-88-3   | U             | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | U             | 0.5                         |
| Total Xylenes                       | 1330-20-7  | U             | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | U             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | U             | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | U             | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | U             | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | U             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | U             | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

1,2 Dichloroethane-d4 104%  
Toluene-d8 102%  
Bromofluorobenzene 98%

QC Limits

{83-112}  
{93-104}  
{87-105}

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

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VOLATILE ORGANICS ANALYSIS DATA  
METHOD BLANK REPORT  
Target Compound List

Method Blank Number : RB050195 Client I.D. : 722450.2602 /  
Date Extracted/Prepared : 05/01/95 SEYMORE JOHNSON  
Date Analyzed : 05/01/95 Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 624  
Lab File No. : >L0486

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 3             | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | UU            | 1.0                         |
| Methylene Chloride        | 75-09-2    | UU            | 1.0                         |
| Acetone                   | 67-64-1    | UU            | 10.0                        |
| Carbon Disulfide          | 75-15-0    | UU            | 1.0                         |
| 1,1-Dichloroethene        | 75-35-4    | UU            | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | UU            | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | UU            | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | U             | 1.0                         |
| Chloroform                | 67-66-3    | 2             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | UU            | 1.0                         |
| 2-Butanone                | 78-93-3    | UU            | 10.0                        |
| 1,1,1-Trichloroethane     | 71-55-6    | UU            | 0.5                         |
| Carbon Tetrachloride      | 56-23-5    | UU            | 2.0                         |
| Bromodichloromethane      | 75-27-4    | UU            | 1.0                         |
| Vinyl Acetate             | 108-05-4   | UU            | 10.0                        |
| 1,2-Dichloropropane       | 78-87-5    | UU            | 1.0                         |
| Trans-1,3-Dichloropropene | 10061-02-6 | UU            | 2.0                         |
| Trichloroethene           | 79-01-6    | UU            | 1.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | UU            | 1.0                         |
| Benzene                   | 71-43-2    | UU            | 0.5                         |
| Dibromochloromethane      | 124-48-1   | UU            | 1.0                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | UU            | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | UU            | 5.0                         |
| Bromoform                 | 75-25-2    | UU            | 1.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | UU            | 5.0                         |
| 2-Hexanone                | 591-78-6   | UU            | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | UU            | 1.0                         |
| Tetrachloroethene         | 127-18-4   | UU            | 1.0                         |
| Toluene                   | 108-88-3   | UU            | 0.5                         |
| Chlorobenzene             | 108-90-7   | UU            | 1.0                         |
| Ethyl Benzene             | 100-41-4   | UU            | 0.5                         |
| Styrene                   | 100-42-5   | UU            | 1.0                         |
| Total Xylenes             | 1330-20-7  | UU            | 0.5                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |      | QC Limits |
|-----------------------|------|-----------|
| 1,2 Dichloroethane-d4 | 104% | (83-112)  |
| Toluene-d8            | 102% | (93-104)  |
| Bromofluorobenzene    | 98%  | (87-105)  |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

VOLATILE ORGANICS ANALYSIS DATA

METHOD BLANK REPORT

GC Confirmation and Additional Compounds

Method Blank Number : RB050295 Client I.D. : 722450.2  
Date Extracted/Prepared : 05/02/95 SEYMORE J. N  
Date Analyzed : 05/02/95 Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 624  
Lab File No. : >L0501

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------------------|------------|---------------|-----------------------------|
| Benzene                             | 71-43-2    | U             | 0.5                         |
| Toluene                             | 108-88-3   | U             | 0.5                         |
| Ethyl Benzene                       | 100-41-4   | U             | 0.5                         |
| Total Xylenes                       | 1330-20-7  | U             | 0.5                         |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | U             | 0.5                         |
| 1,2,4-Trimethylbenzene              | 526-73-8   | U             | 0.5                         |
| 1,2,3-Trimethylbenzene              | 108-67-8   | U             | 0.5                         |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | U             | 1.0                         |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | U             | 1.0                         |
| Chlorobenzene                       | 108-90-7   | U             | 1.0                         |
| Styrene                             | 100-42-5   | U             | 1.0                         |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | U             | 1.0                         |
| Isopropyl ether         | 108-20-3   | U             | 1.0                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene     | 541-73-1   | U             | 1.0                         |
| 1,2-Dichlorobenzene     | 95-50-1    | U             | 1.0                         |
| 1,4-Dichlorobenzene     | 106-46-7   | U             | 1.0                         |

Surrogate Recoveries:

1,2 Dichloroethane-d4 103%  
Toluene-d8 99%  
Bromofluorobenzene 95%

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

VOLATILE ORGANICS ANALYSIS DATA  
METHOD BLANK REPORT

Method Blank Number : RB050295 Client I.D. : 722450.2602 /  
Date Extracted/Prepared : 05/02/95 SEYMORE JOHN SO  
Date Analyzed : 05/02/95 Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 624  
Lab File No. : >L0501

| Compound Name             | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|---------------------------|------------|---------------|-----------------------------|
| Chloromethane             | 74-87-3    | U             | 1.0                         |
| Bromomethane              | 74-83-9    | 3             | 1.0                         |
| Vinyl Chloride            | 75-01-4    | U             | 1.0                         |
| Chloroethane              | 75-00-3    | U             | 1.0                         |
| Methylene Chloride        | 75-09-2    | U             | 1.0                         |
| Acetone                   | 67-64-1    | U             | 1.0                         |
| Carbon Disulfide          | 75-15-0    | U             | 10.0                        |
| 1,1-Dichloroethene        | 75-35-4    | U             | 1.0                         |
| 1,1-Dichloroethane        | 75-34-3    | U             | 1.0                         |
| Trans-1,2-Dichloroethene  | 156-60-5   | U             | 1.0                         |
| Cis-1,2-Dichloroethene    | 156-59-2   | U             | 1.0                         |
| Chloroform                | 67-66-3    | 2             | 1.0                         |
| 1,2-Dichloroethane        | 107-06-2   | U             | 1.0                         |
| 2-Butanone                | 78-93-3    | U             | 1.0                         |
| 1,1,1-Trichloroethane     | 71-55-6    | U             | 10.0                        |
| Carbon Tetrachloride      | 56-23-5    | U             | 0.5                         |
| Bromodichloromethane      | 75-27-4    | 1             | 2.0                         |
| Vinyl Acetate             | 108-05-4   | U             | 1.0                         |
| 1,2-Dichloropropane       | 78-87-5    | U             | 10.0                        |
| Trans-1,3-Dichloropropene | 10061-02-6 | U             | 1.0                         |
| Trichloroethene           | 79-01-6    | U             | 2.0                         |
| 1,1,2-Trichloroethane     | 79-00-5    | U             | 1.0                         |
| Benzene                   | 71-43-2    | U             | 1.0                         |
| Dibromochloromethane      | 124-48-1   | U             | 0.5                         |
| Cis-1,3-Dichloropropene   | 10061-01-5 | U             | 1.0                         |
| 2-Chloroethylvinyl Ether  | 110-75-8   | U             | 1.0                         |
| Bromoform                 | 75-25-2    | U             | 5.0                         |
| 4-Methyl-2-Pentanone      | 108-10-1   | U             | 1.0                         |
| 2-Hexanone                | 591-78-6   | U             | 5.0                         |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | U             | 5.0                         |
| Tetrachloroethene         | 127-18-4   | U             | 1.0                         |
| Toluene                   | 108-88-3   | U             | 1.0                         |
| Chlorobenzene             | 108-90-7   | U             | 0.5                         |
| Ethyl Benzene             | 100-41-4   | U             | 1.0                         |
| Styrene                   | 100-42-5   | U             | 0.5                         |
| Total Xylenes             | 1330-20-7  | U             | 1.0                         |
| Trichlorofluoromethane    | 75-69-4    | U             | 0.5                         |

Surrogate Recoveries:

|                       |      |           |
|-----------------------|------|-----------|
| 1,2 Dichloroethane-d4 | 103% | QC Limits |
| Toluene-d8            | 99%  | (83-112)  |
| Bromofluorobenzene    | 95%  | (93-104)  |
|                       |      | (87-105)  |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |             |
|-------------------------|------------|--------------------|-------------|
| Client Sample Number    | : MW-3 REF | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05933MS |                    | : SEYMORE   |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264   |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00      |
| Date Extracted/Prepared | : 05/01/95 | Method             | : 624       |
| Date Analyzed           | : 05/01/95 | Matrix             | : WATER     |
|                         |            | Lab File No.       | : >L0494    |
|                         |            | Method Blank No.   | : RB050195  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | 480           | 152%     |
| Toluene                             | 108-88-3   | 45            | 95%      |
| Ethyl Benzene                       | 100-41-4   | 250           | 78%      |
| Total Xylenes                       | 1330-20-7  | 340           | 108%     |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 47 NS         | ---      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 110 NS        | ---      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 30 NS         | ---      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 31 NS         | ---      |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 34            | 74%      |
| Chlorobenzene                       | 108-90-7   | 21            | 103%     |
| Styrene                             | 100-42-5   | 23            | 116%     |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------|------------|---------------|----------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---      |
| Isopropyl ether         | 108-20-3   | 4 NS          | ---      |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---      |
| 1,3-Dichlorobenzene     | 541-73-1   | 20            | 100%     |
| 1,2-Dichlorobenzene     | 95-50-1    | 21            | 103%     |
| 1,4-Dichlorobenzene     | 106-46-7   | 19            | 95%      |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 101% |
| Toluene-d8            | 97%  |
| Bromofluorobenzene    | 98%  |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

NS = Not spiked.

U = Compound analyzed for, but not detected above the reporting limit.

B = Compound found in blank and sample. Compare blank and sample data.

\* = Reporting limits are roughly the method detection limits for reagent wa

E = Compound is detected but concentration is outside of calibration limits

NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA

|                         |            |                      |                  |
|-------------------------|------------|----------------------|------------------|
| Client Sample Number    | : MW-3 REF | Target Compound List | : 722450.2602 /  |
| Lab Sample Number       | : X05933MS | Client I.D.          | : SEYMORE JOHNSO |
| Date Sampled            | : 04/18/95 | Lab Project No.      | : 95-1264        |
| Date Received           | : 04/19/95 | Effective Dilution   | : 1.00           |
| Date Extracted/Prepared | : 05/01/95 | Method               | : 624            |
| Date Analyzed           | : 05/01/95 | Matrix               | : WATER          |
|                         |            | Lab File No.         | : >L0494         |
|                         |            | Method Blank No.     | : RB050195       |

| Compound Name             | Cas Number | Conc.<br>ug/L | REC<br>% |
|---------------------------|------------|---------------|----------|
| Chloromethane             | 74-87-3    | 12            | 62%      |
| Bromomethane              | 74-83-9    | 18 B          | 80%      |
| Vinyl Chloride            | 75-01-4    | 12            | 60%      |
| Chloroethane              | 75-00-3    | 17            | 85%      |
| Methylene Chloride        | 75-09-2    | 22            | 110%     |
| Acetone                   | 67-64-1    | 24            | 120%     |
| Carbon Disulfide          | 75-15-0    | 19            | 94%      |
| 1,1-Dichloroethene        | 75-35-4    | 23            | 110%     |
| 1,1-Dichloroethane        | 75-34-3    | 21            | 103%     |
| Trans-1,2-Dichloroethene  | 156-60-5   | 20            | 98%      |
| Cis-1,2-Dichloroethene    | 156-59-2   | 320           | 109%     |
| Chloroform                | 67-66-3    | 25 B          | 123%     |
| 1,2-Dichloroethane        | 107-06-2   | 21            | 84%      |
| 2-Butanone                | 78-93-3    | 21            | 103%     |
| 1,1,1-Trichloroethane     | 71-55-6    | 18            | 88%      |
| Carbon Tetrachloride      | 56-23-5    | 19            | 93%      |
| Bromodichloromethane      | 75-27-4    | 19            | 95%      |
| Vinyl Acetate             | 108-05-4   | 17            | 85%      |
| 1,2-Dichloropropane       | 78-87-5    | 22            | 108%     |
| Trans-1,3-Dichloropropene | 10061-02-6 | 10            | 48%      |
| Trichloroethene           | 79-01-6    | 180           | 88%      |
| 1,1,2-Trichloroethane     | 79-00-5    | 21            | 105%     |
| Benzene                   | 71-43-2    | 480           | 152%     |
| Dibromochloromethane      | 124-48-1   | 19            | 97%      |
| Cis-1,3-Dichloropropene   | 10061-01-5 | 18            | 92%      |
| 2-Chloroethylvinyl Ether  | 110-75-8   | 1             | 7%       |
| Bromoform                 | 75-25-2    | 17            | 84%      |
| 4-Methyl-2-Pentanone      | 108-10-1   | 17            | 84%      |
| 2-Hexanone                | 591-78-6   | 23            | 113%     |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | 18            | 90%      |
| Tetrachloroethene         | 127-18-4   | 20            | 99%      |
| Toluene                   | 108-88-3   | 45            | 95%      |
| Chlorobenzene             | 108-90-7   | 21            | 103%     |
| Ethyl Benzene             | 100-41-4   | 250           | 78%      |
| Styrene                   | 100-42-5   | 23            | 116%     |
| Total Xylenes             | 1330-20-7  | 340           | 108%     |
| Trichlorofluoromethane    | 75-69-4    | 18            | 91%      |

Surrogate Recoveries:

QC Limits

|                       |      |          |
|-----------------------|------|----------|
| 1,2 Dichloroethane-d4 | 101% | (83-112) |
| Toluene-d8            | 97%  | (93-104) |
| Bromofluorobenzene    | 98%  | (87-105) |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |              |                    |             |
|-------------------------|--------------|--------------------|-------------|
| Client Sample Number    | : CPT-18 REF | Client I.D.        | : 722450.26 |
| Lab Sample Number       | : X05923MS   |                    | : SEYMORE J |
| Date Sampled            | : 04/18/95   | Lab Project No.    | : 95-1264   |
| Date Received           | : 04/19/95   | Effective Dilution | : 5.00      |
| Date Extracted/Prepared | : 05/02/95   | Method             | : 624       |
| Date Analyzed           | : 05/02/95   | Matrix             | : WATER     |
|                         |              | Lab File No.       | : >L0505    |
|                         |              | Method Blank No.   | : RB050295  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | 890           | 56%      |
| Toluene                             | 108-88-3   | 110           | 101%     |
| Ethyl Benzene                       | 100-41-4   | 190           | 92%      |
| Total Xylenes                       | 1330-20-7  | 120           | 74%      |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | NS            | ---      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 13 NS         | ---      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 5 NS          | ---      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 23 NS         | ---      |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 48            | 48%      |
| Chlorobenzene                       | 108-90-7   | 100           | 100%     |
| Styrene                             | 100-42-5   | 4             | 4%       |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---                         |
| Isopropyl ether         | 108-20-3   | 28 NS         | ---                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---                         |
| 1,3-Dichlorobenzene     | 541-73-1   | 100           | 100%                        |
| 1,2-Dichlorobenzene     | 95-50-1    | 100           | 100%                        |
| 1,4-Dichlorobenzene     | 106-46-7   | 94            | 94%                         |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 99% |
| Toluene-d8            | 97% |
| Bromofluorobenzene    | 96% |

QC Limits

|          |
|----------|
| (83-112) |
| (93-104) |
| (87-105) |

QUALIFIERS:

NS = Not spiked.

U = Compound analyzed for, but not detected above the reporting limit.

B = Compound found in blank and sample. Compare blank and sample data.

\* = Reporting limits are roughly the method detection limits for reagent water.

E = Compound is detected but concentration is outside of calibration limits.

NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA

|                         |              |                    |                   |
|-------------------------|--------------|--------------------|-------------------|
| Client Sample Number    | : CPT-18 REF | Client I.D.        | : 722450.2602 /   |
| Lab Sample Number       | : X05923MS   |                    | : SEYMORE JOHN SO |
| Date Sampled            | : 04/18/95   | Lab Project No.    | : 95-1264         |
| Date Received           | : 04/19/95   | Effective Dilution | : 5.00            |
| Date Extracted/Prepared | : 05/02/95   | Method             | : 624             |
| Date Analyzed           | : 05/02/95   | Matrix             | : WATER           |
|                         |              | Lab File No.       | : >L0505          |
|                         |              | Method Blank No.   | : RB050295        |

| Compound Name             | Cas Number | Conc.<br>ug/L | REC<br>% |
|---------------------------|------------|---------------|----------|
| Chloromethane             | 74-87-3    | 54            | 54%      |
| Bromomethane              | 74-83-9    | 89 B          | 89%      |
| Vinyl Chloride            | 75-01-4    | 61            | 61%      |
| Chloroethane              | 75-00-3    | 89            | 89%      |
| Methylene Chloride        | 75-09-2    | 110           | 110%     |
| Acetone                   | 67-64-1    | 142           | 142%     |
| Carbon Disulfide          | 75-15-0    | 100           | 100%     |
| 1,1-Dichloroethene        | 75-35-4    | 130           | 130%     |
| 1,1-Dichloroethane        | 75-34-3    | 120           | 120%     |
| Trans-1,2-Dichloroethene  | 156-60-5   | 99            | 99%      |
| Cis-1,2-Dichloroethene    | 156-59-2   | 140           | 140%     |
| Chloroform                | 67-66-3    | 130 B         | 130%     |
| 1,2-Dichloroethane        | 107-06-2   | 110           | 110%     |
| 2-Butanone                | 78-93-3    | 95            | 95%      |
| 1,1,1-Trichloroethane     | 71-55-6    | 97            | 97%      |
| Carbon Tetrachloride      | 56-23-5    | 100           | 100%     |
| Bromodichloromethane      | 75-27-4    | 96 B          | 96%      |
| Vinyl Acetate             | 108-05-4   | 63            | 63%      |
| 1,2-Dichloropropane       | 78-87-5    | 100           | 100%     |
| Trans-1,3-Dichloropropene | 10061-02-6 | 54            | 54%      |
| Trichloroethene           | 79-01-6    | 190           | 190%     |
| 1,1,2-Trichloroethane     | 79-00-5    | 100           | 100%     |
| Benzene                   | 71-43-2    | 890           | 89%      |
| Dibromochloromethane      | 124-48-1   | 92            | 92%      |
| Cis-1,3-Dichloropropene   | 10061-01-5 | 98            | 98%      |
| 2-Chloroethylvinyl Ether  | 110-75-8   | 21            | 21%      |
| Bromoform                 | 75-25-2    | 82            | 82%      |
| 4-Methyl-2-Pentanone      | 108-10-1   | 90            | 90%      |
| 2-Hexanone                | 591-78-6   | 82            | 82%      |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | 84            | 84%      |
| Tetrachloroethene         | 127-18-4   | 110           | 110%     |
| Toluene                   | 108-88-3   | 110           | 110%     |
| Chlorobenzene             | 108-90-7   | 100           | 100%     |
| Ethyl Benzene             | 100-41-4   | 190           | 190%     |
| Styrene                   | 100-42-5   | 4             | 4%       |
| Total Xylenes             | 1330-20-7  | 120           | 120%     |
| Trichlorofluoromethane    | 75-69-4    | 94            | 94%      |

Surrogate Recoveries:

|                       |     |
|-----------------------|-----|
| 1,2 Dichloroethane-d4 | 99% |
| Toluene-d8            | 97% |
| Bromofluorobenzene    | 96% |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water.  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |            |
|-------------------------|------------|--------------------|------------|
| Client Sample Number    | : 624 REF  | Client I.D.        | : 722450.2 |
| Lab Sample Number       | : 624 REF  | Lab Project No.    | : 95-1264  |
| Date Sampled            | : NA       | Effective Dilution | : 1.00     |
| Date Received           | : NA       | Method             | : 624      |
| Date Extracted/Prepared | : 05/02/95 | Matrix             | : WATER    |
| Date Analyzed           | : 05/02/95 | Lab File No.       | : >L0506   |
|                         |            | Method Blank No.   | : RB050295 |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | 22            | 109%     |
| Toluene                             | 108-88-3   | 21            | 105%     |
| Ethyl Benzene                       | 100-41-4   | 22            | 109%     |
| Total Xylenes                       | 1330-20-7  | 24            | 118%     |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | NS            | ---      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | NS            | ---      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | NS            | ---      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | NS            | ---      |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | 8             | 40%      |
| Chlorobenzene                       | 108-90-7   | 23            | 114%     |
| Styrene                             | 100-42-5   | 22            | 110%     |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|-------------------------|------------|---------------|-----------------------------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---                         |
| Isopropyl ether         | 108-20-3   | NS            | ---                         |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---                         |
| 1,3-Dichlorobenzene     | 541-73-1   | 22            | 108%                        |
| 1,2-Dichlorobenzene     | 95-50-1    | 22            | 108%                        |
| 1,4-Dichlorobenzene     | 106-46-7   | 20            | 102%                        |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 107% |
| Toluene-d8            | 100% |
| Bromofluorobenzene    | 98%  |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

NS = Not spiked.  
U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
NA = Not applicable or not available.

Analyst

Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021

VOLATILE ORGANICS ANALYSIS DATA

|                         |            |                    |                  |
|-------------------------|------------|--------------------|------------------|
| Client Sample Number    | : 624 REF  | Client I.D.        | : 722450.2602 /  |
| Lab Sample Number       | : 624 REF  |                    | SEYMORE JOHNSTON |
| Date Sampled            | : NA       | Lab Project No.    | : 95-1264        |
| Date Received           | : NA       | Effective Dilution | : 1.00           |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624            |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER          |
|                         |            | Lab File No.       | : >L0506         |
|                         |            | Method Blank No.   | : RB050295       |

| Compound Name             | Cas Number | Conc.<br>ug/L | REC<br>% |
|---------------------------|------------|---------------|----------|
| Chloromethane             | 74-87-3    | 11            | 56%      |
| Bromomethane              | 74-83-9    | 19 B          | 97%      |
| Vinyl Chloride            | 75-01-4    | 13            | 64%      |
| Chloroethane              | 75-00-3    | 19            | 95%      |
| Methylene Chloride        | 75-09-2    | 23            | 115%     |
| Acetone                   | 67-64-1    | 29            | 145%     |
| Carbon Disulfide          | 75-15-0    | 21            | 107%     |
| 1,1-Dichloroethene        | 75-35-4    | 25            | 127%     |
| 1,1-Dichloroethane        | 75-34-3    | 22            | 111%     |
| Trans-1,2-Dichloroethene  | 156-60-5   | 21            | 106%     |
| Cis-1,2-Dichloroethene    | 156-59-2   | 23            | 116%     |
| Chloroform                | 67-66-3    | 26 B          | 128%     |
| 1,2-Dichloroethane        | 107-06-2   | 23            | 115%     |
| 2-Butanone                | 78-93-3    | 22            | 108%     |
| 1,1,1-Trichloroethane     | 71-55-6    | 20            | 99%      |
| Carbon Tetrachloride      | 56-23-5    | 22            | 112%     |
| Bromodichloromethane      | 75-27-4    | 21 B          | 104%     |
| Vinyl Acetate             | 108-05-4   | 6             | 32%      |
| 1,2-Dichloropropane       | 78-87-5    | 22            | 112%     |
| Trans-1,3-Dichloropropene | 10061-02-6 | 12            | 62%      |
| Trichloroethene           | 79-01-6    | 25            | 124%     |
| 1,1,2-Trichloroethane     | 79-00-5    | 22            | 112%     |
| Benzene                   | 71-43-2    | 22            | 109%     |
| Dibromochloromethane      | 124-48-1   | 21            | 103%     |
| Cis-1,3-Dichloropropene   | 10061-01-5 | 22            | 112%     |
| 2-Chloroethylvinyl Ether  | 110-75-8   | 4             | 19%      |
| Bromoform                 | 75-25-2    | 18            | 89%      |
| 4-Methyl-2-Pentanone      | 108-10-1   | 22            | 110%     |
| 2-Hexanone                | 591-78-6   | 21            | 106%     |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | 19            | 94%      |
| Tetrachloroethene         | 127-18-4   | 23            | 117%     |
| Toluene                   | 108-88-3   | 21            | 105%     |
| Chlorobenzene             | 108-90-7   | 23            | 114%     |
| Ethyl Benzene             | 100-41-4   | 22            | 109%     |
| Styrene                   | 100-42-5   | 22            | 110%     |
| Total Xylenes             | 1330-20-7  | 24            | 118%     |
| Trichlorofluoromethane    | 75-69-4    | 20            | 100%     |

Surrogate Recoveries:

|                       |      |
|-----------------------|------|
| 1,2 Dichloroethane-d4 | 107% |
| Toluene-d8            | 100% |
| Bromofluorobenzene    | 98%  |

QC Limits

(83-112)  
(93-104)  
(87-105)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limit.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent water  
E = Compound is detected but concentration is outside of calibration limits.  
NA = Not applicable or not available.

Analyst

Approved

VOLATILE ORGANICS ANALYSIS DATA  
GC Confirmation and Additional Compounds

|                         |            |                    |            |
|-------------------------|------------|--------------------|------------|
| Client Sample Number    | : TMB LFB  | Client I.D.        | : 722450.2 |
| Lab Sample Number       | : TMB LFB  |                    | : SEYMORE  |
| Date Sampled            | : NA       | Lab Project No.    | : 95-1264  |
| Date Received           | : NA       | Effective Dilution | : 5.00     |
| Date Extracted/Prepared | : 05/02/95 | Method             | : 624      |
| Date Analyzed           | : 05/02/95 | Matrix             | : WATER    |
|                         |            | Lab File No.       | : >L0507   |
|                         |            | Method Blank No.   | : TMB LFB  |

GC CONFIRMATION

| Compound Name                       | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------------------|------------|---------------|----------|
| Benzene                             | 71-43-2    | NS            | ---      |
| Toluene                             | 108-88-3   | NS            | ---      |
| Ethyl Benzene                       | 100-41-4   | NS            | ---      |
| Total Xylenes                       | 1330-20-7  | NS            | ---      |
| 1,3,5-Trimethylbenzene (Mesitylene) | 95-63-6    | 18            | 90%      |
| 1,2,4-Trimethylbenzene              | 526-73-8   | 17            | 85%      |
| 1,2,3-Trimethylbenzene              | 108-67-8   | 19            | 94%      |
| 1,2,3,4-Tetramethylbenzene          | 488-23-3   | 21            | 107%     |
| Methyl-t-butyl ether (MTBE)         | 156-60-5   | NS            | ---      |
| Chlorobenzene                       | 108-90-7   | NS            | ---      |
| Styrene                             | 100-42-5   | NS            | ---      |

ADDITIONAL COMPOUNDS

| Compound Name           | Cas Number | Conc.<br>ug/L | REC<br>% |
|-------------------------|------------|---------------|----------|
| Dichlorodifluoromethane | 75-71-8    | NS            | ---      |
| Isopropyl ether         | 108-20-3   | NS            | ---      |
| 1,2-Dibromoethane (EDB) | 106-93-4   | NS            | ---      |
| 1,3-Dichlorobenzene     | 541-73-1   | NS            | ---      |
| 1,2-Dichlorobenzene     | 95-50-1    | NS            | ---      |
| 1,4-Dichlorobenzene     | 106-46-7   | NS            | ---      |

Surrogate Recoveries:

QC Limits

|                       |      |          |
|-----------------------|------|----------|
| 1,2 Dichloroethane-d4 | 106% | (83-112) |
| Toluene-d8            | 102% | (93-104) |
| Bromofluorobenzene    | 99%  | (87-105) |

QUALIFIERS:

NS = Not spiked.

U = Compound analyzed for, but not detected above the reporting limit.

B = Compound found in blank and sample. Compare blank and sample data.

\* = Reporting limits are roughly the method detection limits for reagent w.

E = Compound is detected but concentration is outside of calibration limit.

NA = Not applicable or not available.

Analyst

Approved

Semivolatile Analysis Data Report  
Page 1

Client Sample Number : MW-4  
Lab Sample Number : X05926  
Date Sampled : 04/18/95  
Date Received : 04/19/95  
Date Extracted/Prepared : 04/21/95  
Date Analyzed : 04/25/95

Client I.D. : 722450.2602 / SEYMORE JOHNS  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 625  
Matrix : WATER  
Lab File No. : >28585  
Method Blank No. : WB042195

BASE/NEUTRALS

| Compound Name                | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|------------------------------|------------|---------------|-----------------------------|
| bis(2-Chloroethyl) Ether     | 111-44-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene          | 541-73-1   | U             | 0.5                         |
| 1,4-Dichlorobenzene          | 106-46-7   | U             | 0.5                         |
| 1,2-Dichlorobenzene          | 95-50-1    | U             | 0.5                         |
| bis(2-chloroisopropyl) Ether | 108-60-1   | U             | 1.0                         |
| N-Nitroso-Di-n-Propylamine   | 621-64-7   | U             | 1.0                         |
| Hexachloroethane             | 67-72-1    | U             | 1.0                         |
| Nitrobenzene                 | 98-95-3    | U             | 0.5                         |
| Isophorone                   | 78-59-1    | U             | 1.0                         |
| bis(2-Chloroethoxy) Methane  | 111-91-1   | U             | 1.0                         |
| 1,2,4-Trichlorobenzene       | 120-82-1   | U             | 1.0                         |
| Naphthalene                  | 91-20-3    | 180           | 0.5                         |
| 4-Chloroaniline              | 106-47-8   | U             | 2.0                         |
| Hexachlorobutadiene          | 87-68-3    | U             | 0.5                         |
| 2-Methylnaphthalene          | 91-57-6    | 57            | 0.5                         |
| Hexachlorocyclopentadiene    | 77-47-4    | U             | 2.0                         |
| 2-Chloronaphthalene          | 91-58-7    | U             | 0.5                         |
| 2-Nitroaniline               | 88-74-4    | U             | 2.0                         |
| Dimethylphthalate            | 131-11-3   | U             | 0.5                         |
| 2,6-Dinitrotoluene           | 606-20-2   | U             | 2.0                         |
| Acenaphthylene               | 208-96-8   | 2             | 0.5                         |
| o-Nitroaniline               | 99-09-2    | U             | 2.0                         |
| Acenaphthene                 | 83-32-9    | 5             | 0.5                         |
| Dibenzofuran                 | 132-64-9   | U             | 0.5                         |
| 2,4-Dinitrotoluene           | 121-14-2   | U             | 2.0                         |
| Diethylphthalate             | 84-66-2    | U             | 0.5                         |
| 4-Chlorophenyl-phenylether   | 7005-72-3  | U             | 0.5                         |
| Fluorene                     | 86-73-7    | 5             | 0.5                         |
| 4-Nitroaniline               | 100-01-6   | U             | 2.0                         |
| N-Nitrosodiphenylamine       | 86-30-6    | U             | 0.5                         |
| 4-Bromophenyl-phenylether    | 101-55-3   | U             | 0.5                         |
| Hexachlorobenzene            | 118-74-1   | U             | 0.5                         |
| Phenanthrene                 | 85-01-8    | 11            | 0.5                         |
| Anthracene                   | 120-12-7   | 3             | 0.5                         |
| Di-n-Butylphthalate          | 84-74-2    | U             | 0.5                         |
| Fluoranthene                 | 206-44-0   | 2             | 0.5                         |
| Pyrene                       | 129-00-0   | 1             | 0.5                         |
| Butylbenzylphthalate         | 85-68-7    | U             | 0.5                         |
| 3,3'-Dichlorobenzidine       | 91-94-1    | U             | 2.0                         |
| Benzo(a)Anthracene           | 56-55-3    | U             | 0.5                         |
| bis(2-Ethylhexyl) Phthalate  | 117-81-7   | 1             | 0.5                         |
| Chrysene                     | 218-01-9   | U             | 0.5                         |
| Di-n-Octyl Phthalate         | 117-84-0   | U             | 0.5                         |
| Benzo(b) Fluoranthene        | 205-99-2   | U             | 0.5                         |
| Benzo(k) Fluoranthene        | 207-08-9   | U             | 0.5                         |
| Benzo(a) Pyrene              | 50-32-8    | U             | 0.5                         |
| Indeno(1,2,3-cd) Pyrene      | 193-39-5   | U             | 0.5                         |
| Dibenz(a,h) Anthracene       | 53-70-3    | U             | 0.5                         |
| Benzo(g,h,i) Perylene        | 191-24-2   | U             | 0.5                         |

Analyst

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Semivolatile Analysis Data Report  
Page 2

|                         |            |                    |            |
|-------------------------|------------|--------------------|------------|
| Client Sample Number    | : MW-4     | Client I.D.        | : 722450.2 |
| Lab Sample Number       | : X05926   |                    | : SEYMORE  |
| Date Sampled            | : 04/18/95 | Lab Project No.    | : 95-1264  |
| Date Received           | : 04/19/95 | Effective Dilution | : 1.00     |
| Date Extracted/Prepared | : 04/21/95 | Method             | : 625      |
| Date Analyzed           | : 04/25/95 | Matrix             | : WATER    |
|                         |            | Lab File No.       | : >28585   |
|                         |            | Method Blank No.   | : WB042195 |

ACIDS

| Compound Name              | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|----------------------------|------------|---------------|-----------------------------|
| Phenol                     | 108-95-2   | U             | 2.0                         |
| 2-Chlorophenol             | 95-57-8    | U             | 2.0                         |
| Benzylalcohol              | 100-51-6   | U             | 5.0                         |
| 2-Methylphenol             | 95-48-7    | 11            | 1.0                         |
| 4-Methylphenol             | 106-44-5   | 11            | 1.0                         |
| 2-Nitrophenol              | 88-75-5    | U             | 2.0                         |
| 2,4-Dimethylphenol         | 105-67-9   | 10            | 2.0                         |
| Benzoic Acid               | 65-85-0    | U             | 5.0                         |
| 2,4-Dichlorophenol         | 120-83-2   | U             | 2.0                         |
| 4-Chloro-3-Methylphenol    | 59-50-7    | U             | 2.0                         |
| 2,4,6-Trichlorophenol      | 88-06-2    | U             | 2.0                         |
| 2,4-Dinitrophenol          | 51-28-5    | U             | 10.0                        |
| 4-Nitrophenol              | 100-02-7   | U             | 5.0                         |
| 4,6-Dinitro-2-Methylphenol | 534-52-1   | U             | 10.0                        |
| Pentachlorophenol          | 87-86-5    | U             | 5.0                         |
| 2,4,5-Trichlorophenol      | 95-95-4    | U             | 2.0                         |

Expected Surrogate Recoveries:

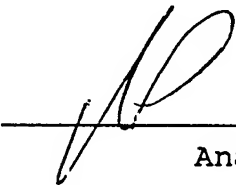
|                      |     |
|----------------------|-----|
| Nitrobenzene-d5      | 100 |
| 2-Fluorobiphenyl     | 100 |
| Terphenyl-d14        | 100 |
| Phenol-d6            | 200 |
| 2-Fluorophenol       | 200 |
| 2,4,6 Tribromophenol | 200 |

Actual Recoveries:

|      |     |           |
|------|-----|-----------|
| ug/L | 37% | (35-107)  |
| ug/L | 70% | (45-105)  |
| ug/L | 60% | (33- 104) |
| ug/L | 57% | (20- 94)  |
| ug/L | 64% | (22- 88)  |
| ug/L | 74% | (17- 90)  |

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limits.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
Unless otherwise noted concentrations for soils are reported on a  
dry weight basis. (NA = not applicable or not available)

  
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Analyst

  
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Semivolatiles Analysis Data Report  
Page 1

Client Sample Number : MW-4 REF  
Lab Sample Number : X05926 REF  
Date Sampled : 04/18/95  
Date Received : 04/19/95  
Date Extracted/Prepared : 04/21/95  
Date Analyzed : 04/25/95

Client I.D. : 722450.2602 /  
SEYMORE JOHNS  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 625  
Matrix : WATER  
Lab File No. : >28586  
Method Blank No. : WB042195

BASE/NEUTRALS

| Compound Name                | Cas Number | Conc.<br>ug/L | REC<br>% |
|------------------------------|------------|---------------|----------|
| bis(2-Chloroethyl) Ether     | 111-44-4   | 61            | 61%      |
| 1,3-Dichlorobenzene          | 541-73-1   | 80            | 80%      |
| 1,4-Dichlorobenzene          | 106-46-7   | 84            | 84%      |
| 1,2-Dichlorobenzene          | 95-50-1    | 84            | 84%      |
| bis(2-chloroisopropyl) Ether | 108-60-1   | 99            | 99%      |
| N-Nitroso-Di-n-Propylamine   | 621-64-7   | 120           | 120%     |
| Hexachloroethane             | 67-72-1    | 70            | 70%      |
| Nitrobenzene                 | 98-95-3    | 45            | 45%      |
| Isophorone                   | 78-59-1    | 85            | 85%      |
| bis(2-Chloroethoxy) Methane  | 111-91-1   | 100           | 100%     |
| 1,2,4-Trichlorobenzene       | 120-82-1   | 90            | 90%      |
| Naphthalene                  | 91-20-3    | 260           | 75%      |
| 4-Chloroaniline              | 106-47-8   | NS            | ---      |
| Hexachlorobutadiene          | 87-68-3    | 89            | 89%      |
| 2-Methylnaphthalene          | 91-57-6    | NS            | ---      |
| Hexachlorocyclopentadiene    | 77-47-4    | 58            | 58%      |
| 2-Chloronaphthalene          | 91-58-7    | 100           | 100%     |
| 2-Nitroaniline               | 88-74-4    | NS            | ---      |
| Dimethylphthalate            | 131-11-3   | 18            | 18%      |
| 2,6-Dinitrotoluene           | 606-20-2   | 72            | 72%      |
| Acenaphthylene               | 208-96-8   | 110           | 108%     |
| 4-Nitroaniline               | 99-09-2    | NS            | ---      |
| Acenaphthene                 | 83-32-9    | 120           | 115%     |
| Dibenzofuran                 | 132-64-9   | NS            | ---      |
| 2,4-Dinitrotoluene           | 121-14-2   | 73            | 73%      |
| Diethylphthalate             | 84-66-2    | 68            | 68%      |
| 4-Chlorophenyl-phenylether   | 7005-72-3  | 110           | 110%     |
| Fluorene                     | 86-73-7    | 120           | 115%     |
| 4-Nitroaniline               | 100-01-6   | NS            | ---      |
| N-Nitrosodiphenylamine       | 86-30-6    | 110           | 110%     |
| 4-Bromophenyl-phenylether    | 101-55-3   | 100           | 100%     |
| Hexachlorobenzene            | 118-74-1   | 96            | 96%      |
| Phenanthrene                 | 85-01-8    | 110           | 99%      |
| Anthracene                   | 120-12-7   | 100           | 97%      |
| Di-n-Butylphthalate          | 84-74-2    | 100           | 100%     |
| Fluoranthene                 | 206-44-0   | 110           | 108%     |
| Pyrene                       | 129-00-0   | 100           | 99%      |
| Butylbenzylphthalate         | 85-68-7    | 100           | 100%     |
| 3,3'-Dichlorobenzidine       | 91-94-1    | U             | 0%       |
| Benzo(a)Anthracene           | 56-55-3    | 110           | 110%     |
| bis(2-Ethylhexyl) Phthalate  | 117-81-7   | 120           | 119%     |
| Chrysene                     | 218-01-9   | 100           | 100%     |
| Di-n-Octyl Phthalate         | 117-84-0   | 150           | 150%     |
| Benzo(b) Fluoranthene        | 205-99-2   | 110           | 110%     |
| Benzo(k) Fluoranthene        | 207-08-9   | 110           | 110%     |
| Benzo(a) Pyrene              | 50-32-8    | 100           | 100%     |
| Indeno(1,2,3-cd) Pyrene      | 193-39-5   | 85            | 85%      |
| Dibenz(a,h) Anthracene       | 53-70-3    | 85            | 85%      |
| Benzo(g,h,i) Perylene        | 191-24-2   | 79            | 79%      |

Analyst

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Semivolatile Analysis Data Report  
Page 2

Client Sample Number : MW-4 REF  
Lab Sample Number : X05926 REF  
Date Sampled : 04/18/95  
Date Received : 04/19/95  
Date Extracted/Prepared : 04/21/95  
Date Analyzed : 04/25/95

Client I.D. : 722450.26  
SEYMORE  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 625  
Matrix : WATER  
Lab File No. : >28586  
Method Blank No. : WB042195

ACIDS

| Compound Name              | Cas Number | Conc.<br>ug/L | REC<br>% |
|----------------------------|------------|---------------|----------|
| Phenol                     | 108-95-2   | 68            | 66%      |
| 2-Chlorophenol             | 95-57-8    | 82            | 82%      |
| Benzylalcohol              | 100-51-6   | NS            | ---      |
| 2-Methylphenol             | 95-48-7    | 90            | 80%      |
| 4-Methylphenol             | 106-44-5   | 220           | 209%     |
| 2-Nitrophenol              | 88-75-5    | NS            | ---      |
| 2,4-Dimethylphenol         | 105-67-9   | 120           | 120%     |
| Benzoic Acid               | 65-85-0    | NS            | ---      |
| 2,4-Dichlorophenol         | 120-83-2   | 110           | 110%     |
| 4-Chloro-3-Methylphenol    | 59-50-7    | 130           | 130%     |
| 2,4,6-Trichlorophenol      | 88-06-2    | 110           | 110%     |
| 2,4-Dinitrophenol          | 51-28-5    | U             | 0%       |
| 4-Nitrophenol              | 100-02-7   | 27            | 27%      |
| 4,6-Dinitro-2-Methylphenol | 534-52-1   | U             | 0%       |
| Pentachlorophenol          | 87-86-5    | 150           | 150%     |
| 2,4,5-Trichlorophenol      | 95-95-4    | 140           | 140%     |

Expected Surrogate Recoveries:

|                      |     |
|----------------------|-----|
| Nitrobenzene-d5      | 100 |
| 2-Fluorobiphenyl     | 100 |
| Terphenyl-d14        | 100 |
| Phenol-d6            | 200 |
| 2-Fluorophenol       | 200 |
| 2,4,6 Tribromophenol | 200 |

Actual Recoveries:

|      |      |           |
|------|------|-----------|
| ug/L | 1% X | (35-107)  |
| ug/L | 68%  | (45-105)  |
| ug/L | 49%  | (33- 104) |
| ug/L | 50%  | (20- 94)  |
| ug/L | 60%  | (22- 88)  |
| ug/L | 71%  | (17- 90)  |

QC Limits

QUALIFIERS:

NS = Not spiked.

X = Surrogates not quantifiable due to matrix interferences.

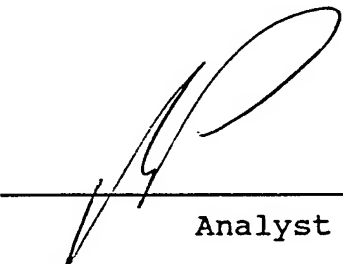
U = Compound analyzed for, but not detected above the reporting limits.

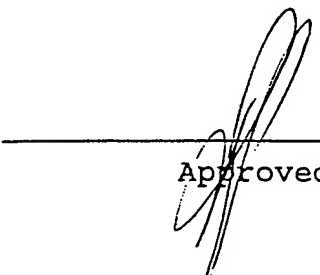
B = Compound found in blank and sample. Compare blank and sample data.

\* = Reporting limits are roughly the method detection limits for reagent wa

E = Compound is detected but concentration is outside of calibration limits

Unless otherwise noted concentrations for soils are reported on a dry weight basis. (NA = not applicable or not available)

  
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Analyst

  
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Semivolatile Analysis Data Report  
Page 1

Client Sample Number : DI REF  
Lab Sample Number : DI REF  
Date Sampled : NA  
Date Received : NA  
Date Extracted/Prepared : 04/21/95  
Date Analyzed : 04/25/95

Client I.D. : 722450.2602 /  
SEYMORE JOHNS  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 625  
Matrix : WATER  
Lab File No. : >28587  
Method Blank No. : WB042195

BASE/NEUTRALS

| Compound Name                | Cas Number | Conc.<br>ug/L | REC<br>% |
|------------------------------|------------|---------------|----------|
| bis(2-Chloroethyl) Ether     | 111-44-4   | 96            | 96%      |
| 1,3-Dichlorobenzene          | 541-73-1   | 80            | 80%      |
| 1,4-Dichlorobenzene          | 106-46-7   | 81            | 81%      |
| 1,2-Dichlorobenzene          | 95-50-1    | 82            | 82%      |
| bis(2-chloroisopropyl) Ether | 108-60-1   | 96            | 96%      |
| N-Nitroso-Di-n-Propylamine   | 621-64-7   | 110           | 110%     |
| Hexachloroethane             | 67-72-1    | 77            | 77%      |
| Nitrobenzene                 | 98-95-3    | 190           | 190%     |
| Isophorone                   | 78-59-1    | 26            | 26%      |
| bis(2-Chloroethoxy) Methane  | 111-91-1   | 110           | 110%     |
| 1,2,4-Trichlorobenzene       | 120-82-1   | 88            | 88%      |
| Naphthalene                  | 91-20-3    | 90            | 90%      |
| 4-Chloroaniline              | 106-47-8   | NS            | ---      |
| Hexachlorobutadiene          | 87-68-3    | 84            | 84%      |
| 2-Methylnaphthalene          | 91-57-6    | NS            | ---      |
| Hexachlorocyclopentadiene    | 77-47-4    | 42            | 42%      |
| 2-Chloronaphthalene          | 91-58-7    | 95            | 95%      |
| 2-Nitroaniline               | 88-74-4    | NS            | ---      |
| Dimethylphthalate            | 131-11-3   | 8             | 8%       |
| 2,6-Dinitrotoluene           | 606-20-2   | 100           | 100%     |
| Acenaphthylene               | 208-96-8   | 96            | 96%      |
| -Nitroaniline                | 99-09-2    | NS            | ---      |
| Acenaphthene                 | 83-32-9    | 96            | 96%      |
| Dibenzofuran                 | 132-64-9   | NS            | ---      |
| 2,4-Dinitrotoluene           | 121-14-2   | 96            | 96%      |
| Diethylphthalate             | 84-66-2    | 51            | 51%      |
| 4-Chlorophenyl-phenylether   | 7005-72-3  | 97            | 97%      |
| Fluorene                     | 86-73-7    | 100           | 100%     |
| 4-Nitroaniline               | 100-01-6   | NS            | ---      |
| N-Nitrosodiphenylamine       | 86-30-6    | 100           | 100%     |
| 4-Bromophenyl-phenylether    | 101-55-3   | 99            | 99%      |
| Hexachlorobenzene            | 118-74-1   | 92            | 92%      |
| Phenanthrene                 | 85-01-8    | 98            | 98%      |
| Anthracene                   | 120-12-7   | 98            | 98%      |
| Di-n-Butylphthalate          | 84-74-2    | 98            | 98%      |
| Fluoranthene                 | 206-44-0   | 100           | 100%     |
| Pyrene                       | 129-00-0   | 93            | 93%      |
| Butylbenzylphthalate         | 85-68-7    | 98            | 98%      |
| 3,3'-Dichlorobenzidine       | 91-94-1    | 110           | 110%     |
| Benzo(a)Anthracene           | 56-55-3    | 97            | 97%      |
| bis(2-Ethylhexyl) Phthalate  | 117-81-7   | 110           | 110%     |
| Chrysene                     | 218-01-9   | 96            | 96%      |
| Di-n-Octyl Phthalate         | 117-84-0   | 130           | 130%     |
| Benzo(b) Fluoranthene        | 205-99-2   | 110           | 110%     |
| Benzo(k) Fluoranthene        | 207-08-9   | 100           | 100%     |
| Benzo(a) Pyrene              | 50-32-8    | 97            | 97%      |
| Indeno(1,2,3-cd) Pyrene      | 193-39-5   | 81            | 81%      |
| Dibenz(a,h) Anthracene       | 53-70-3    | 80            | 80%      |
| Benzo(g,h,i) Perylene        | 191-24-2   | 76            | 76%      |

Analyst

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Semivolatile Analysis Data Report  
Page 2

Client Sample Number : DI REF  
Lab Sample Number : DI REF  
Date Sampled : NA  
Date Received : NA  
Date Extracted/Prepared : 04/21/95  
Date Analyzed : 04/25/95

Client I.D. : 722450.26  
SEYMORE JOHN  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 625  
Matrix : WATER  
Lab File No. : >28587  
Method Blank No. : WB042195

ACIDS

| Compound Name              | Cas Number | Conc.<br>ug/L | REC<br>% |
|----------------------------|------------|---------------|----------|
| Phenol                     | 108-95-2   | 120           | 120%     |
| 2-Chlorophenol             | 95-57-8    | 110           | 110%     |
| Benzylalcohol              | 100-51-6   | NS            | ---      |
| 2-Methylphenol             | 95-48-7    | 120           | 120%     |
| 4-Methylphenol             | 106-44-5   | 190           | 190%     |
| 2-Nitrophenol              | 88-75-5    | NS            | ---      |
| 2,4-Dimethylphenol         | 105-67-9   | 110           | 110%     |
| Benzoic Acid               | 65-85-0    | NS            | ---      |
| 2,4-Dichlorophenol         | 120-83-2   | 120           | 120%     |
| 4-Chloro-3-Methylphenol    | 59-50-7    | 130           | 130%     |
| 2,4,6-Trichlorophenol      | 88-06-2    | 120           | 120%     |
| 2,4-Dinitrophenol          | 51-28-5    | 88            | 88%      |
| 4-Nitrophenol              | 100-02-7   | 160           | 160%     |
| 4,6-Dinitro-2-Methylphenol | 534-52-1   | 110           | 110%     |
| Pentachlorophenol          | 87-86-5    | 70            | 70%      |
| 2,4,5-Trichlorophenol      | 95-95-4    | 120           | 120%     |

Expected Surrogate Recoveries:

|                      |     |
|----------------------|-----|
| Nitrobenzene-d5      | 100 |
| 2-Fluorobiphenyl     | 100 |
| Terphenyl-d14        | 100 |
| Phenol-d6            | 200 |
| 2-Fluorophenol       | 200 |
| 2,4,6 Tribromophenol | 200 |

Actual Recoveries:

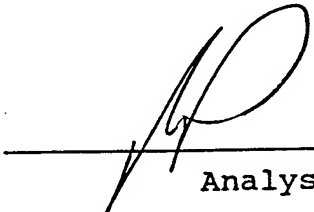
|      |     |
|------|-----|
| ug/L | 72% |
| ug/L | 63% |
| ug/L | 64% |
| ug/L | 74% |
| ug/L | 62% |
| ug/L | 62% |

QC Limits

|          |
|----------|
| (35-107) |
| (45-105) |
| (33-104) |
| (20-94)  |
| (22-88)  |
| (17-90)  |

QUALIFIERS:

NS = Not spiked.  
U = Compound analyzed for, but not detected above the reporting limits.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent wa  
E = Compound is detected but concentration is outside of calibration limits  
Unless otherwise noted concentrations for soils are reported on a  
dry weight basis. (NA = not applicable or not available)

  
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Analyst

  
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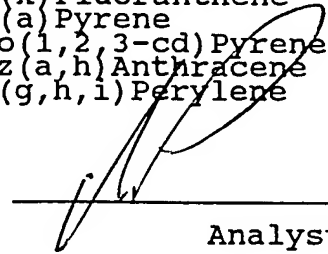
EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303)425-6021  
Semivolatle Analysis Data Report  
Method Blank Report  
Page 1

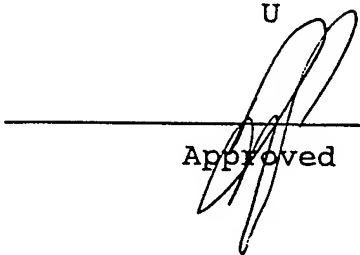
Method Blank Number : WB042195  
Date Extracted/Prepared : 04/21/95  
Date Analyzed : 04/25/95

Client I.D. : 722450.2602 /  
SEYMORE JOHNS  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 625  
Matrix : WATER  
Lab File No. : >28584

BASE/NEUTRALS

| Compound Name                | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|------------------------------|------------|---------------|-----------------------------|
| bis(2-Chloroethyl) Ether     | 111-44-4   | U             | 1.0                         |
| 1,3-Dichlorobenzene          | 541-73-1   | U             | 0.5                         |
| 1,4-Dichlorobenzene          | 106-46-7   | U             | 0.5                         |
| 1,2-Dichlorobenzene          | 95-50-1    | U             | 0.5                         |
| bis(2-chloroisopropyl) Ether | 108-60-1   | U             | 1.0                         |
| N-Nitroso-Di-n-Propylamine   | 621-64-7   | U             | 1.0                         |
| Hexachloroethane             | 67-72-1    | U             | 0.5                         |
| Nitrobenzene                 | 98-95-3    | U             | 1.0                         |
| Isophorone                   | 78-59-1    | U             | 1.0                         |
| bis(2-Chloroethoxy) Methane  | 111-91-1   | U             | 1.0                         |
| 1,2,4-Trichlorobenzene       | 120-82-1   | U             | 0.5                         |
| Naphthalene                  | 91-20-3    | U             | 0.5                         |
| 4-Chloroaniline              | 106-47-8   | U             | 2.0                         |
| Hexachlorobutadiene          | 87-68-3    | U             | 0.5                         |
| 2-Methylnaphthalene          | 91-57-6    | 1             | 0.5                         |
| Hexachlorocyclopentadiene    | 77-47-4    | U             | 2.0                         |
| 2-Chloronaphthalene          | 91-58-7    | U             | 0.5                         |
| 2-Nitroaniline               | 88-74-4    | U             | 0.5                         |
| Dimethylphthalate            | 131-11-3   | U             | 2.0                         |
| 2,6-Dinitrotoluene           | 606-20-2   | U             | 0.5                         |
| Acenaphthylene               | 208-96-8   | U             | 2.0                         |
| -Nitroaniline                | 99-09-2    | U             | 0.5                         |
| Acenaphthene                 | 83-32-9    | U             | 2.0                         |
| Dibenzofuran                 | 132-64-9   | U             | 0.5                         |
| 2,4-Dinitrotoluene           | 121-14-2   | U             | 0.5                         |
| Diethylphthalate             | 84-66-2    | U             | 2.0                         |
| 4-Chlorophenyl-phenylether   | 7005-72-3  | U             | 0.5                         |
| Fluorene                     | 86-73-7    | U             | 0.5                         |
| 4-Nitroaniline               | 100-01-6   | U             | 0.5                         |
| N-Nitrosodiphenylamine       | 86-30-6    | U             | 2.0                         |
| 4-Bromophenyl-phenylether    | 101-55-3   | U             | 0.5                         |
| Hexachlorobenzene            | 118-74-1   | U             | 0.5                         |
| Phenanthrene                 | 85-01-8    | U             | 0.5                         |
| Anthracene                   | 120-12-7   | U             | 0.5                         |
| Di-n-Butylphthalate          | 84-74-2    | 1             | 0.5                         |
| Fluoranthene                 | 206-44-0   | U             | 0.5                         |
| Pyrene                       | 129-00-0   | U             | 0.5                         |
| Butylbenzylphthalate         | 85-68-7    | U             | 0.5                         |
| 3,3'-Dichlorobenzidine       | 91-94-1    | U             | 0.5                         |
| Benzo(a)Anthracene           | 56-55-3    | U             | 2.0                         |
| bis(2-Ethylhexyl) Phthalate  | 117-81-7   | 1             | 0.5                         |
| Chrysene                     | 218-01-9   | U             | 0.5                         |
| Di-n-Octyl Phthalate         | 117-84-0   | U             | 0.5                         |
| Benzo(b) Fluoranthene        | 205-99-2   | U             | 0.5                         |
| Benzo(k) Fluoranthene        | 207-08-9   | U             | 0.5                         |
| Benzo(a) Pyrene              | 50-32-8    | U             | 0.5                         |
| Indeno(1,2,3-cd) Pyrene      | 193-39-5   | U             | 0.5                         |
| Dibenz(a,h) Anthracene       | 53-70-3    | U             | 0.5                         |
| Benzo(g,h,i) Perylene        | 191-24-2   | U             | 0.5                         |

  
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Analyst

  
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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield Wheat Ridge CO 80033  
(303) 425-6021

Method Blank Report  
Page 2

Method Blank Number : WB042195  
Date Extracted/Prepared : 04/21/95  
Date Analyzed : 04/25/95

Client I.D. : 722450.2602  
SEYMORE JOH  
Lab Project No. : 95-1264  
Effective Dilution : 1.00  
Method : 625  
Matrix : WATER  
Lab File No. : >28584

ACIDS

| Compound Name              | Cas Number | Conc.<br>ug/L | Reporting<br>Limit*<br>ug/L |
|----------------------------|------------|---------------|-----------------------------|
| Phenol                     | 108-95-2   | U             | 2.0                         |
| 2-Chlorophenol             | 95-57-8    | U             | 2.0                         |
| Benzylalcohol              | 100-51-6   | U             | 5.0                         |
| 2-Methylphenol             | 95-48-7    | U             | 1.0                         |
| 4-Methylphenol             | 106-44-5   | U             | 1.0                         |
| 2-Nitrophenol              | 88-75-5    | U             | 2.0                         |
| 2,4-Dimethylphenol         | 105-67-9   | U             | 2.0                         |
| Benzoic Acid               | 65-85-0    | U             | 5.0                         |
| 2,4-Dichlorophenol         | 120-83-2   | U             | 2.0                         |
| 4-Chloro-3-Methylphenol    | 59-50-7    | U             | 2.0                         |
| 2,4,6-Trichlorophenol      | 88-06-2    | U             | 2.0                         |
| 2,4-Dinitrophenol          | 51-28-5    | U             | 10.0                        |
| 4-Nitrophenol              | 100-02-7   | U             | 5.0                         |
| 4,6-Dinitro-2-Methylphenol | 534-52-1   | U             | 10.0                        |
| Pentachlorophenol          | 87-86-5    | U             | 5.0                         |
| 2,4,5-Trichlorophenol      | 95-95-4    | U             | 2.0                         |

Expected Surrogate Recoveries:

Nitrobenzene-d5 100  
2-Fluorobiphenyl 100  
Terphenyl-d14 100  
Phenol-d6 200  
2-Fluorophenol 200  
2,4,6 Tribromophenol 200

Actual Recoveries:

ug/L  
ug/L  
ug/L  
ug/L  
ug/L  
ug/L

69%  
62%  
61%  
76%  
59%  
55%

QC Limit

(35-107)  
(45-105)  
(33-104)  
(20-94)  
(22-88)  
(17-90)

QUALIFIERS:

U = Compound analyzed for, but not detected above the reporting limits.  
B = Compound found in blank and sample. Compare blank and sample data.  
\* = Reporting limits are roughly the method detection limits for reagent w.  
E = Compound is detected but concentration is outside of calibration limit.  
Unless otherwise noted concentrations for soils are reported on a  
dry weight basis. (NA = not applicable or not available)

Analyst

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EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH-GASOLINE)

|               |            |                       |                          |
|---------------|------------|-----------------------|--------------------------|
| Date Sampled  | : 4/18/95  | Client Project Number | : 722450.2602            |
| Date Received | : 4/19/95  | Lab Project Number    | : 95-1264                |
| Date Prepared | : 5/1,2/95 | Matrix                | : Water                  |
| Date Analyzed | : 5/1,2/95 | Method Number         | : EPA 5030/8015 Modified |

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample #</u> | <u>Surrogate<br/>Recovery</u> | <u>TVH<br/>mg/L</u> | <u>RL<br/>mg/L</u> |
|-------------------------------|----------------------------|-------------------------------|---------------------|--------------------|
| MB050195                      | METHOD BLANK               | 100%                          | U                   | 0.1                |
| X05922                        | CPT-17                     | 103%                          | 1.8                 | 0.1                |
| X05923                        | CPT-18                     | 116%                          | 2.8                 | 0.1                |
| X05925                        | CPT-19                     | 95%                           | U                   | 0.1                |
| X05926                        | MW-4                       | 109%                          | 17                  | 0.5                |
| X05927                        | MW-4 DUP                   | 106%                          | 17                  | 0.5                |
| X05928                        | MW-12D                     | 102%                          | 0.2                 | 0.1                |
| X05931                        | MW-5                       | 103%                          | 1.0                 | 0.1                |
| X05931 DUP                    | MW-5                       | 102%                          | 1.1                 | 0.1                |
| X05932                        | MW-8                       | 107%                          | 2.4                 | 0.1                |
| X05933                        | MW-3                       | 108%                          | 3.2                 | 0.1                |


QUALIFIERS

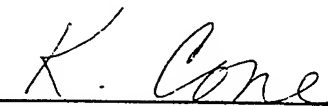
U = TVH analyzed for but not detected.

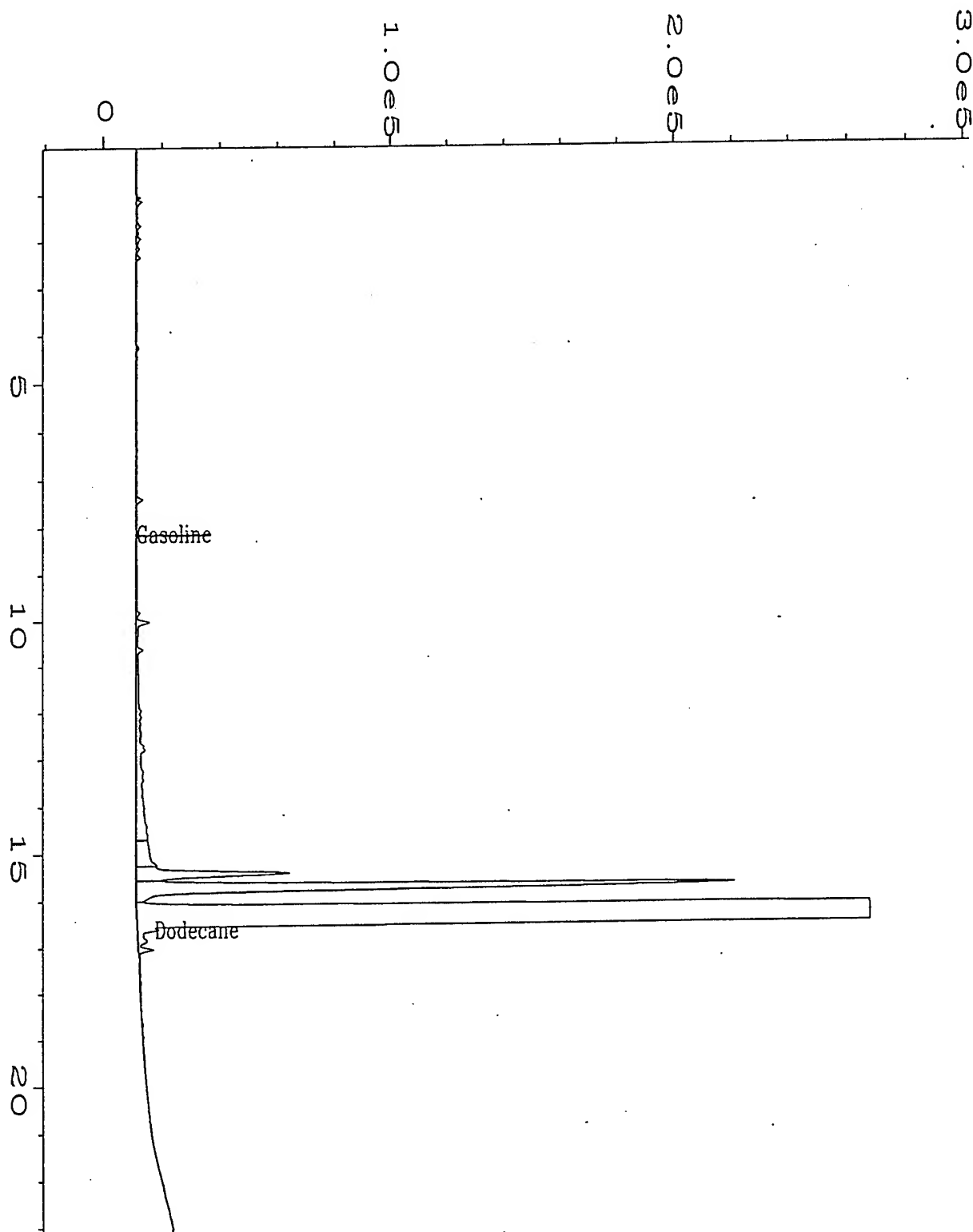
B = TVH found in blank also.

E = Extrapolated value.

RL = Reporting Limit.

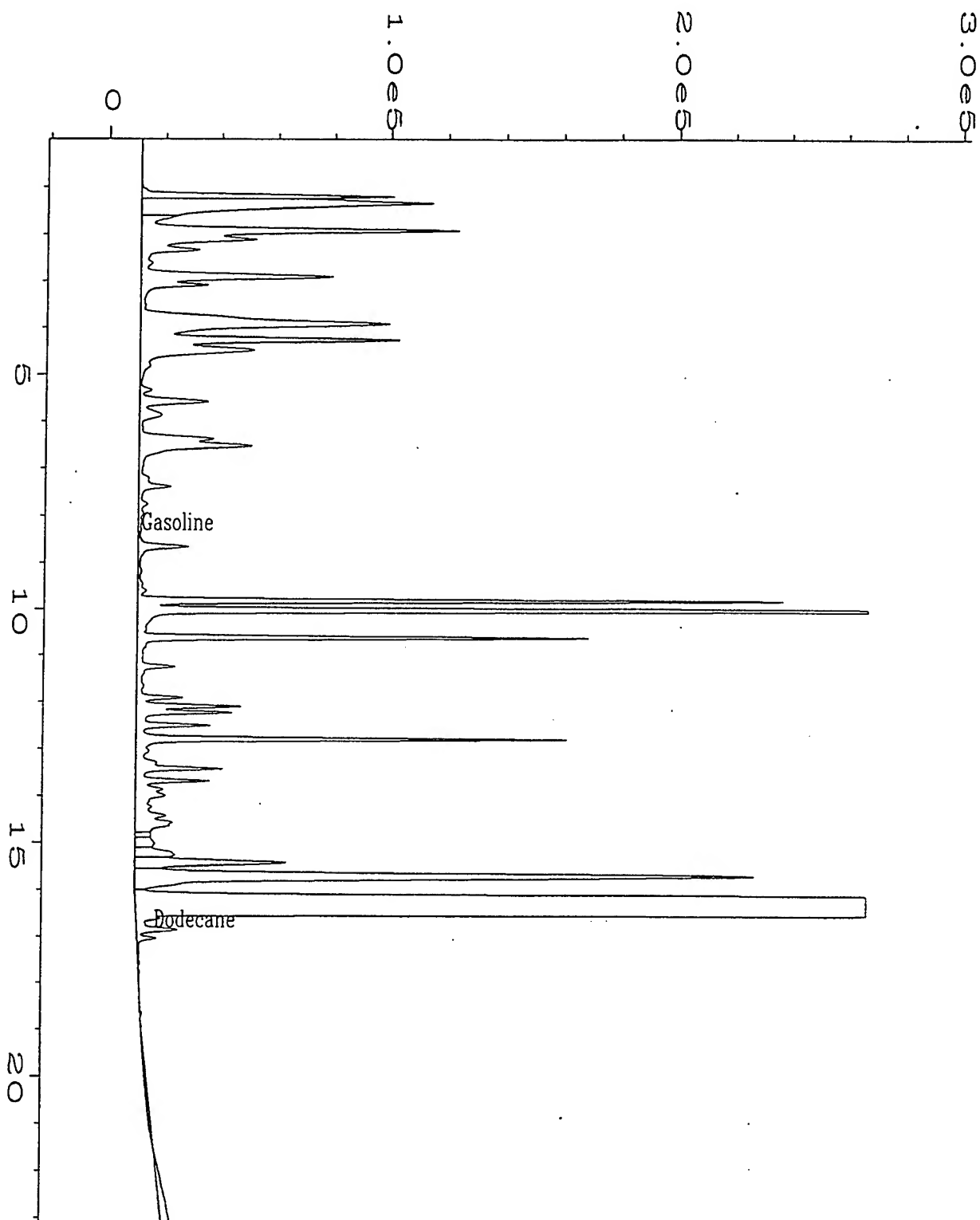
  
Analyst

  
Approved



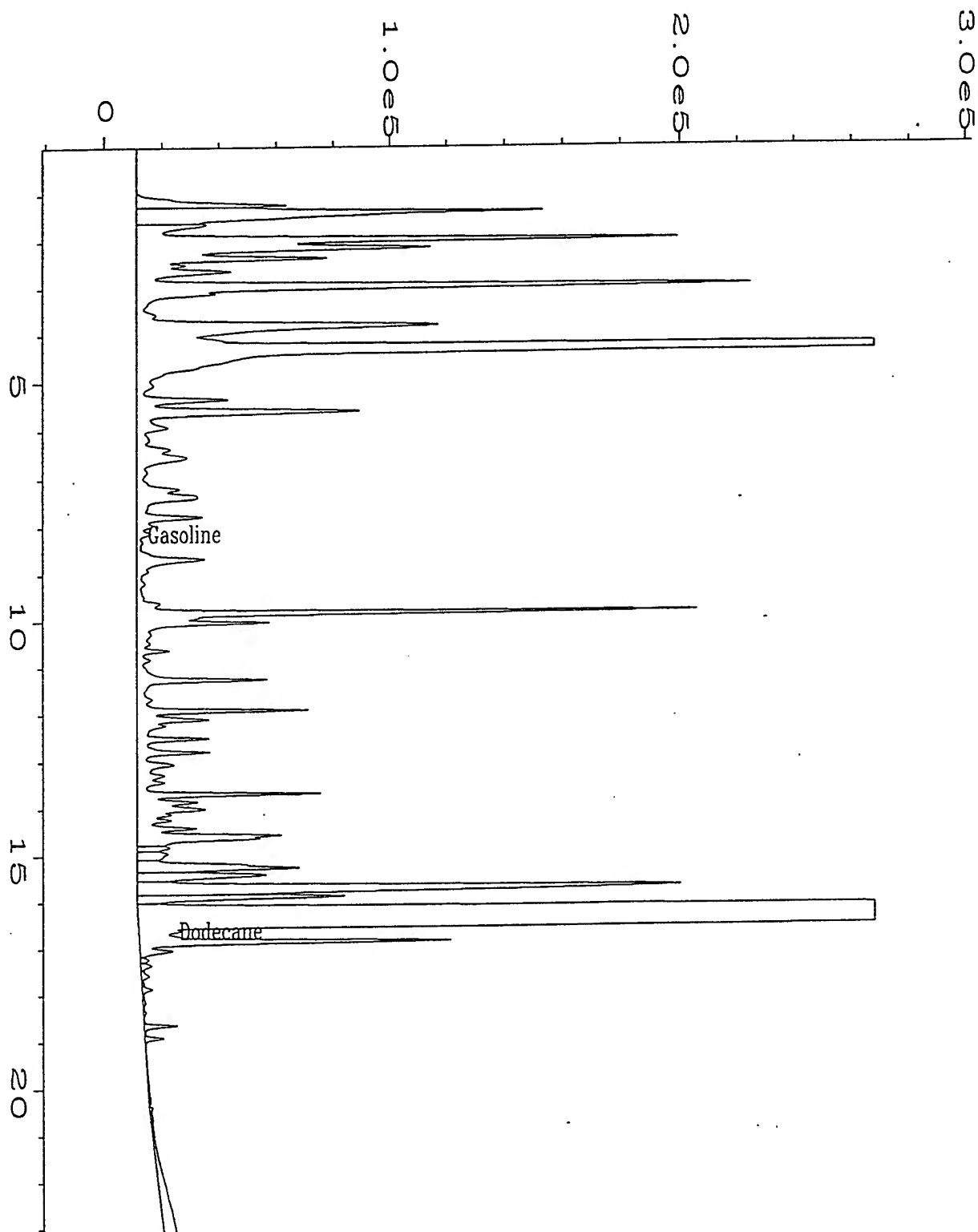
|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\008F0101.D | Page Number       | : 1         |
| Operator           | : S.W. Tyson                          | Vial Number       | : 8         |
| Instrument         | : TVH                                 | Injection Number  | : 1         |
| Sample Name        | : MB050195                            | Sequence Line     | : 1         |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BAS   |
| Printed on         | : 01 May 95 07:19 PM                  | Analysis Method   | : TVH0501.M |
| Report Created on: | 01 May 95 07:46 PM                    | Sample Amount     | : 0         |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |

*pm 5/11/95*



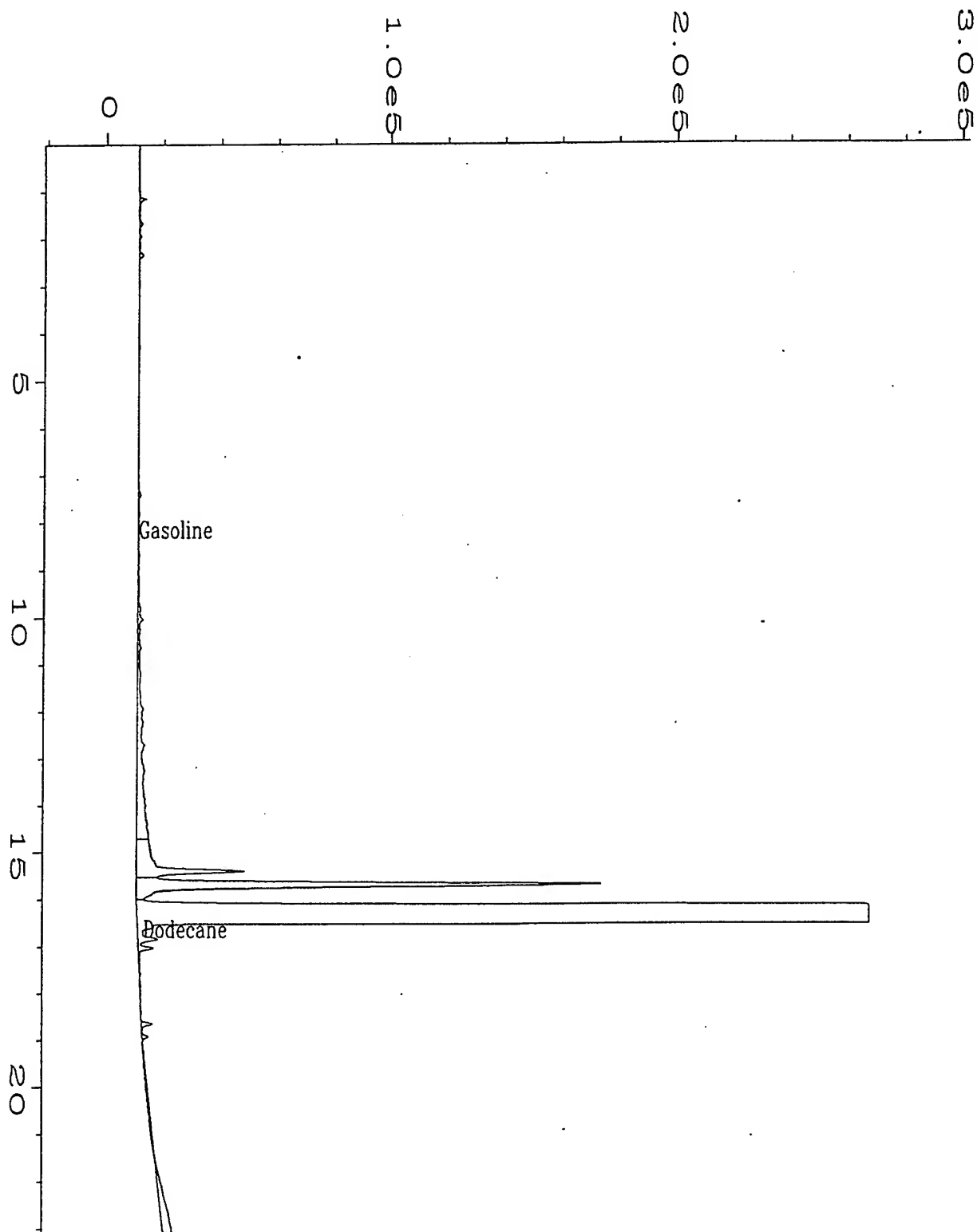
|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\013F0101.D | Page Number       | : 1            |
| Operator           | : S.W. Tyson                          | Vial Number       | : 13           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05922;1                            | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 01 May 95 10:13 PM                  | Analysis Method   | : TVH0501.MTH  |
| Report Created on  | : 02 May 95 07:57 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

CPT-17



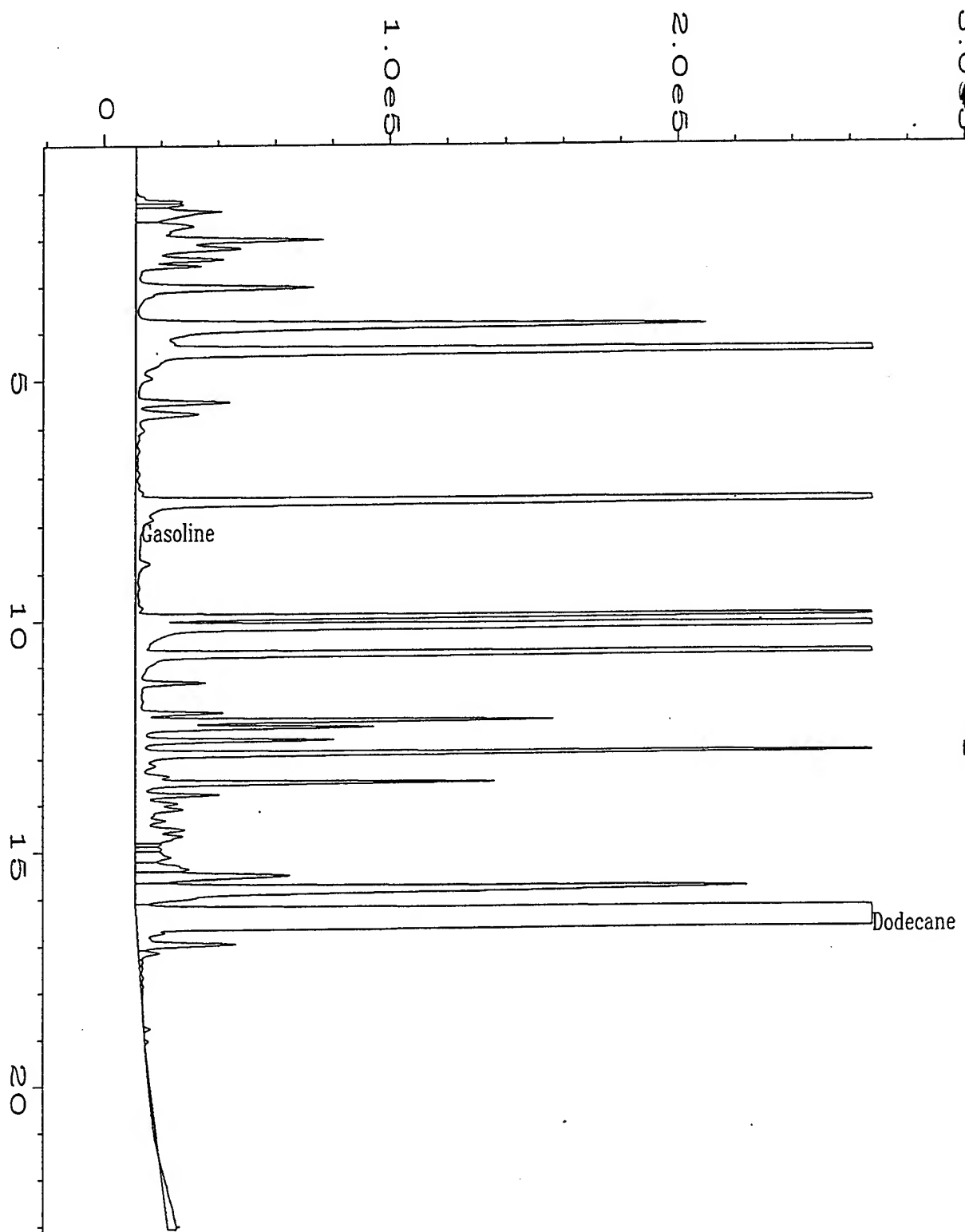
|                    |                                       |                   |          |
|--------------------|---------------------------------------|-------------------|----------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\014F0101.D | Page Number       | : 1      |
| Operator           | : S.W. Tyson                          | Vial Number       | : 14     |
| Instrument         | : TVH                                 | Injection Number  | : 1      |
| Sample Name        | : X05923;1                            | Sequence Line     | : 1      |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BA |
| quired on          | : 01 May 95 10:48 PM                  | Analysis Method   | : TVH050 |
| Report Created on: | 02 May 95 07:58 AM                    | Sample Amount     | : 0      |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :        |
| Multiplier         | : 1                                   |                   |          |

CPT-18

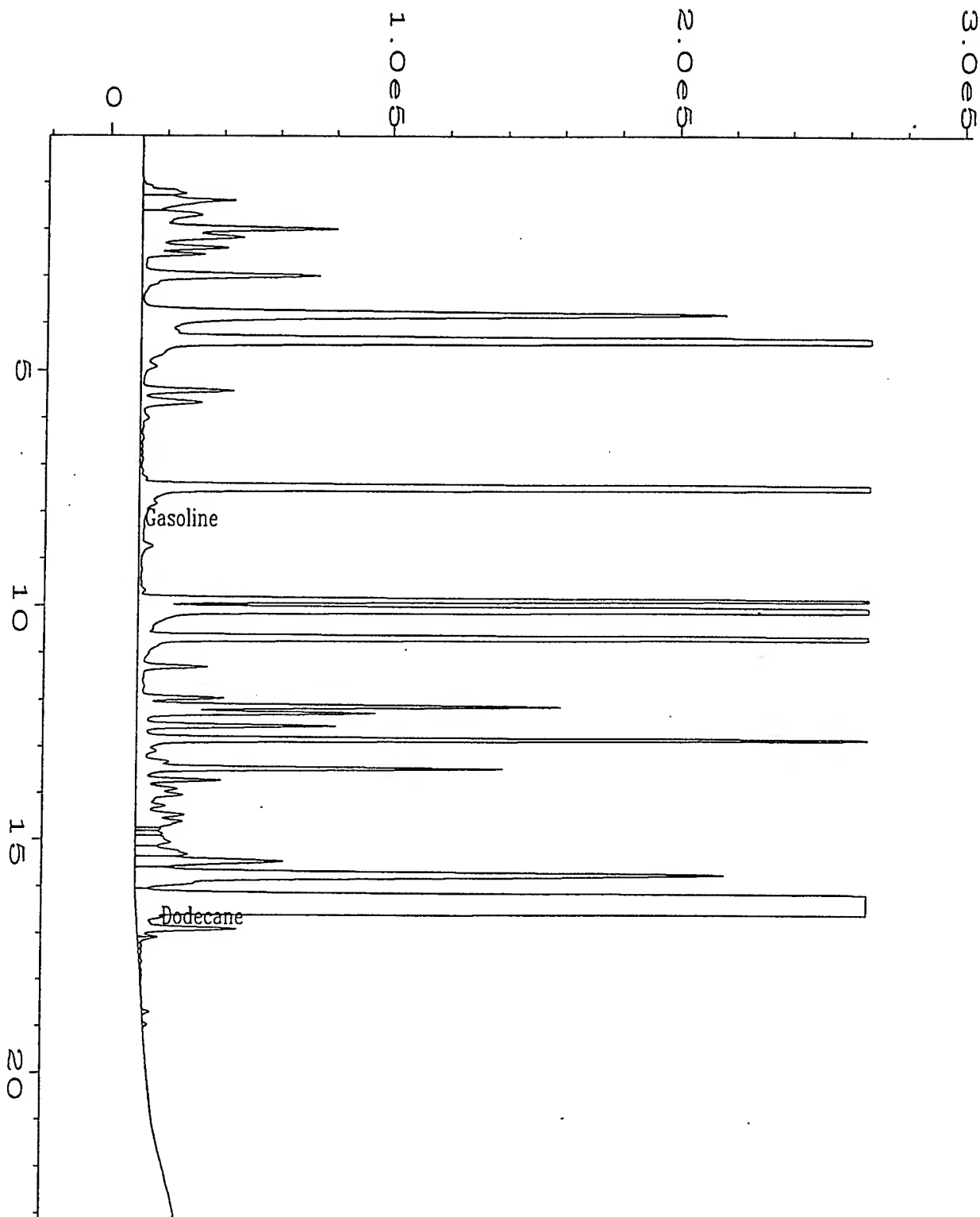


|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\015F0101.D | Page Number        | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number        | : 15          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X05925;1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Printed on         | : 01 May 95 11:23 PM                  | Analysis Method    | : TVH0501.MTH |
| Report Created on: | 02 May 95 07:59 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

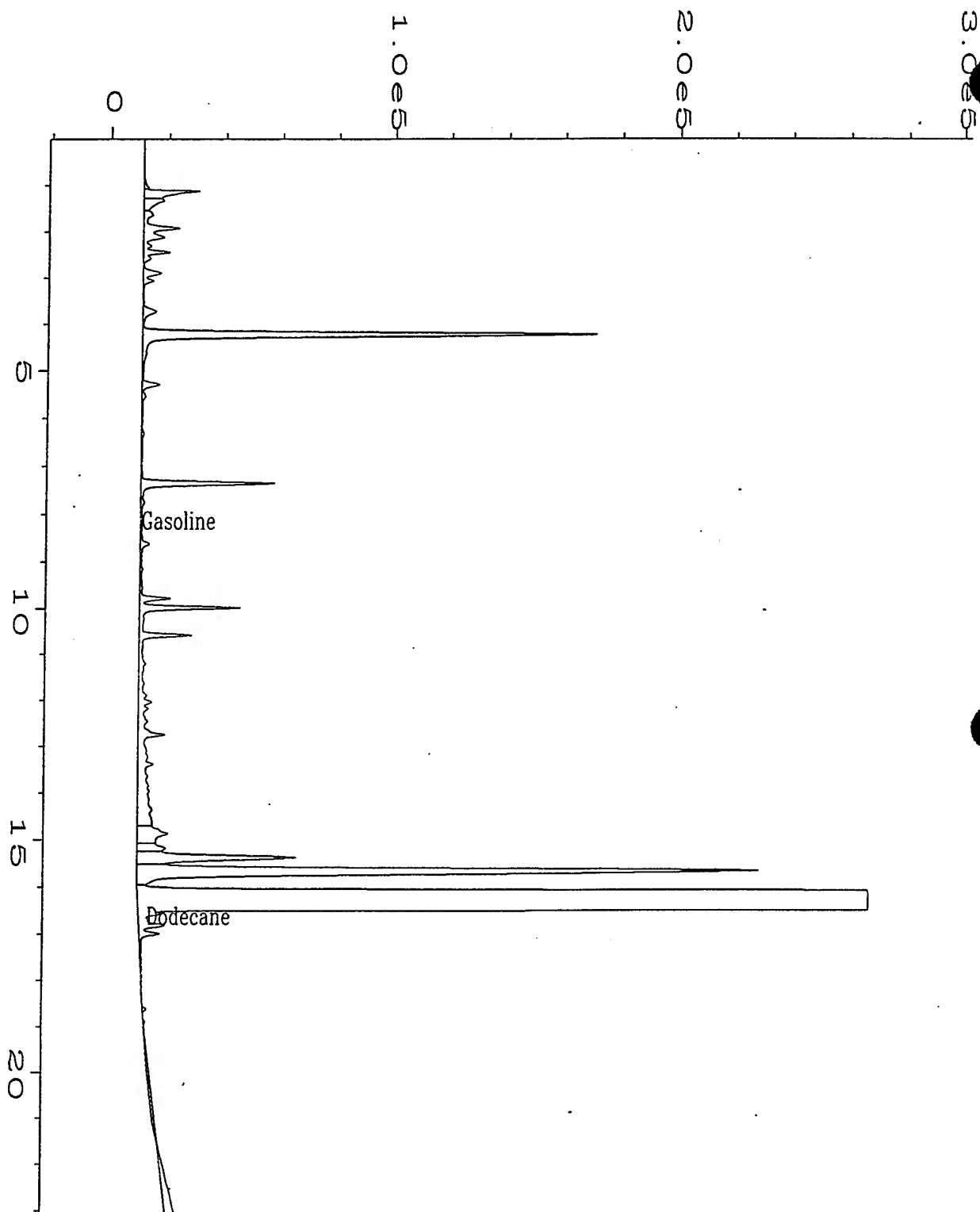
CPT-19



|                    |                                       |                    |         |
|--------------------|---------------------------------------|--------------------|---------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0501\038F0101.D | Page Number        | : 1     |
| Operator           | : S.W. Tyson                          | Vial Number        | : 38    |
| Instrument         | : TVH                                 | Injection Number   | : 1     |
| Sample Name        | : X05926;5                            | Sequence Line      | : 1     |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BZ  |
| quired on          | : 02 May 95 02:02 PM                  | Analysis Method    | : TVH05 |
| Report Created on: | 02 May 95 03:02 PM                    | Sample Amount      | : 0     |
| Last Recalib on    | : 01 MAY 95 05:39 PM                  | ISTD Amount        | :       |
| Multiplier         | : 5                                   |                    |         |
| Sample Info        | : 95-1264;MW-4;1 ml water             |                    |         |

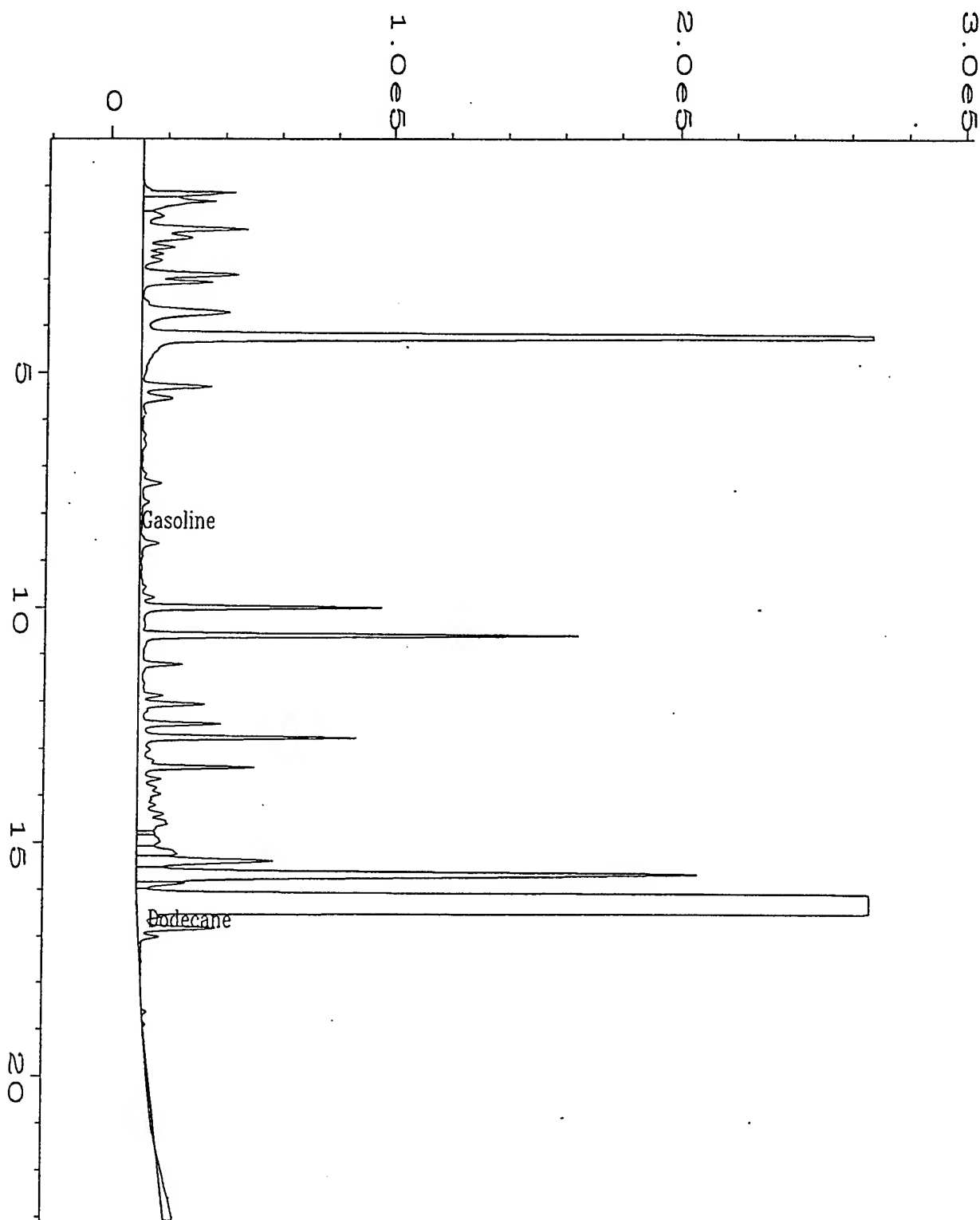


|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\tvh0501\039F0101.D | Page Number       | : 1            |
| Operator           | : S.W. Tyson                          | Vial Number       | : 39           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05927;5                            | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 02 May 95 02:37 PM                  | Analysis Method   | : TVH0501.MTH  |
| Report Created on  | : 02 May 95 03:02 PM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 01 MAY 95 05:39 PM                  | ISTD Amount       | :              |
| Multiplier         | : 5                                   |                   |                |
| Sample Info        | : 95-1264;MW-4 Dupe; 1 ml water       |                   |                |



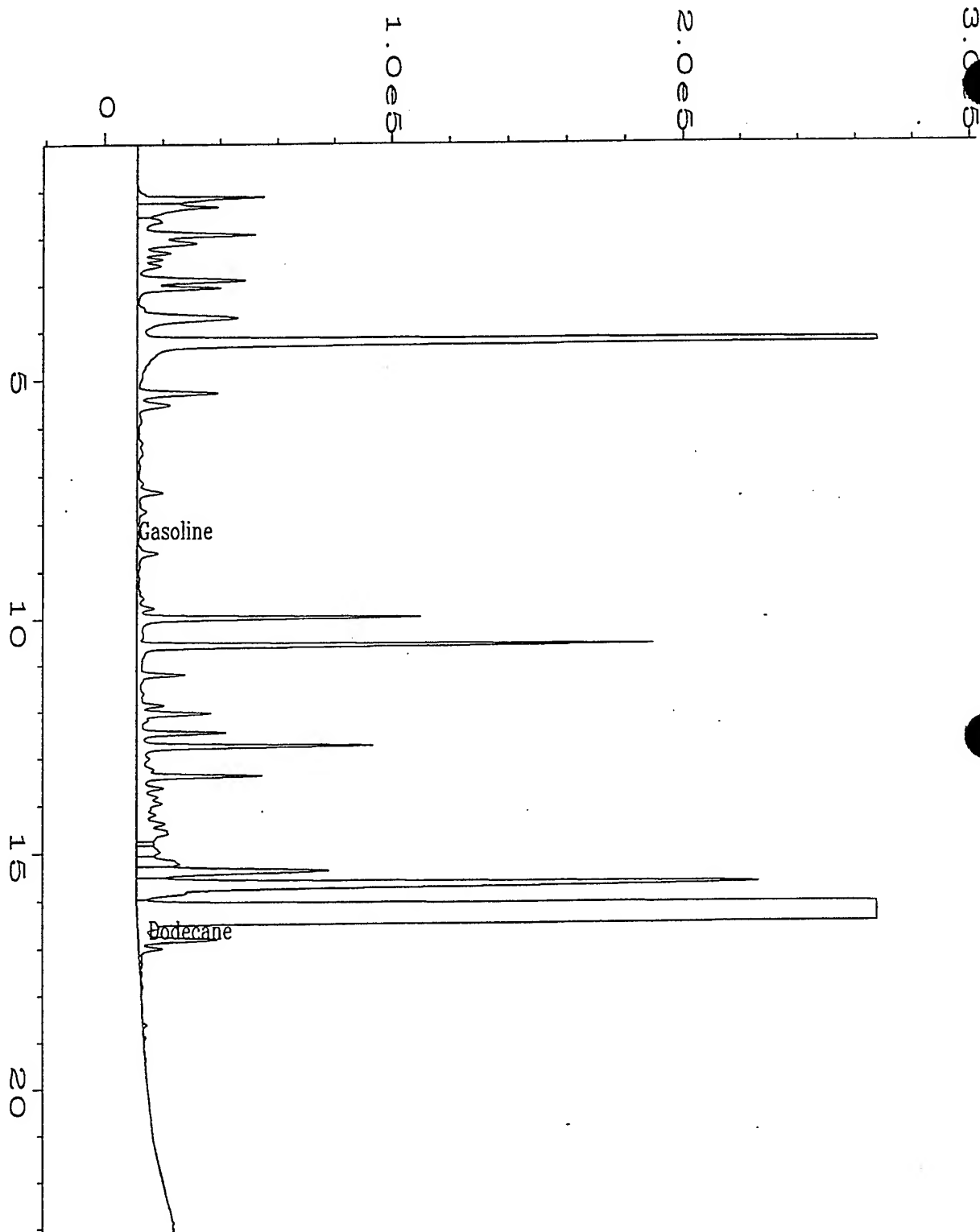
|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\019F0101.D | Page Number        | : 1          |
| Operator           | : S.W. Tyson                          | Vial Number        | : 19         |
| Instrument         | : TVH                                 | Injection Number   | : 1          |
| Sample Name        | : X05928;1                            | Sequence Line      | : 1          |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BA.M     |
| Acquired on        | : 02 May 95 01:43 AM                  | Analysis Method    | : TVH0501.MT |
| Report Created on: | 02 May 95 08:02 AM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |

MW-12D



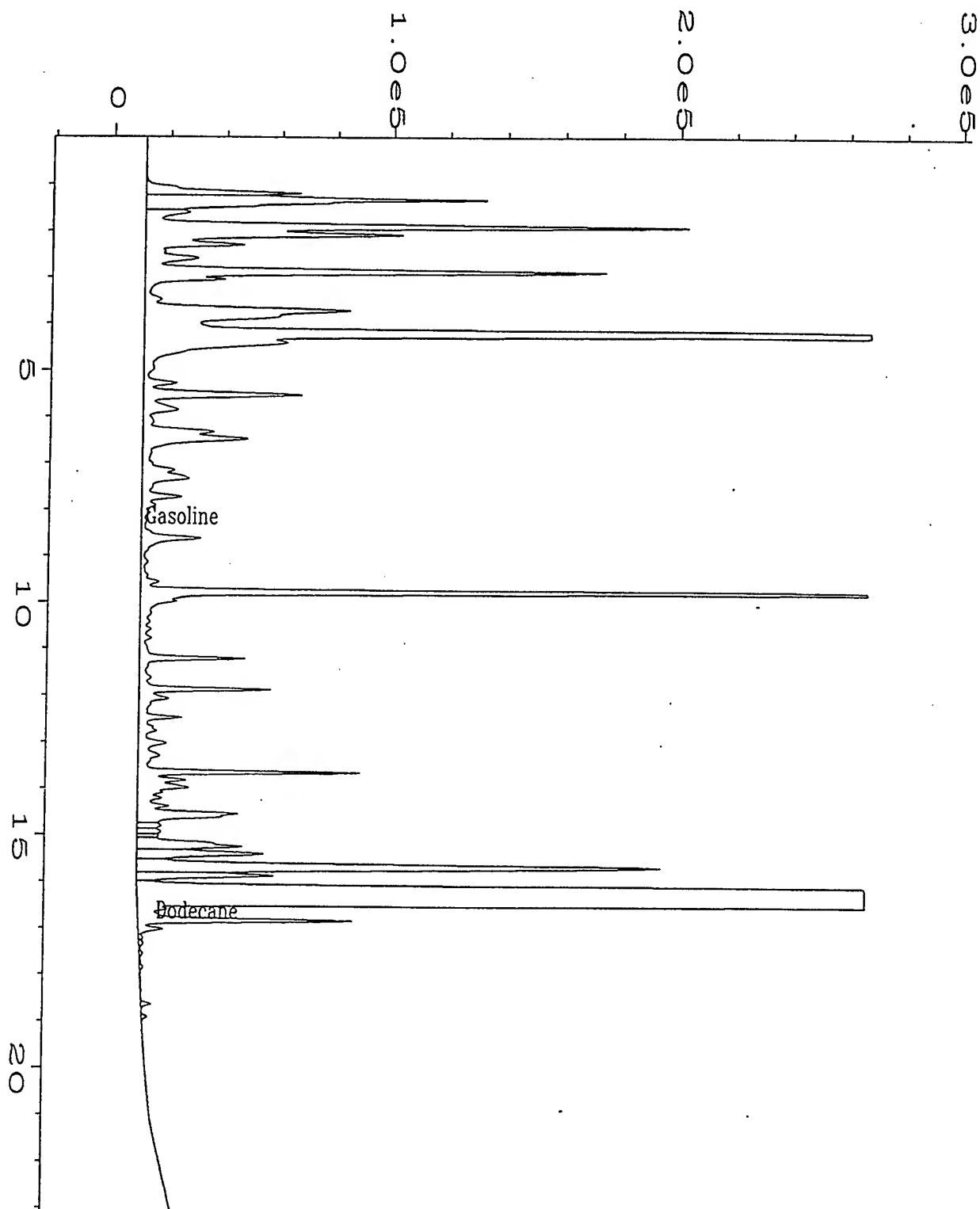
|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\020F0101.D | Page Number        | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number        | : 20          |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : X05931;1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Acquired on        | : 02 May 95 02:18 AM                  | Analysis Method    | : TVH0501.MTH |
| Report Created on: | 02 May 95 08:03 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

MW-5



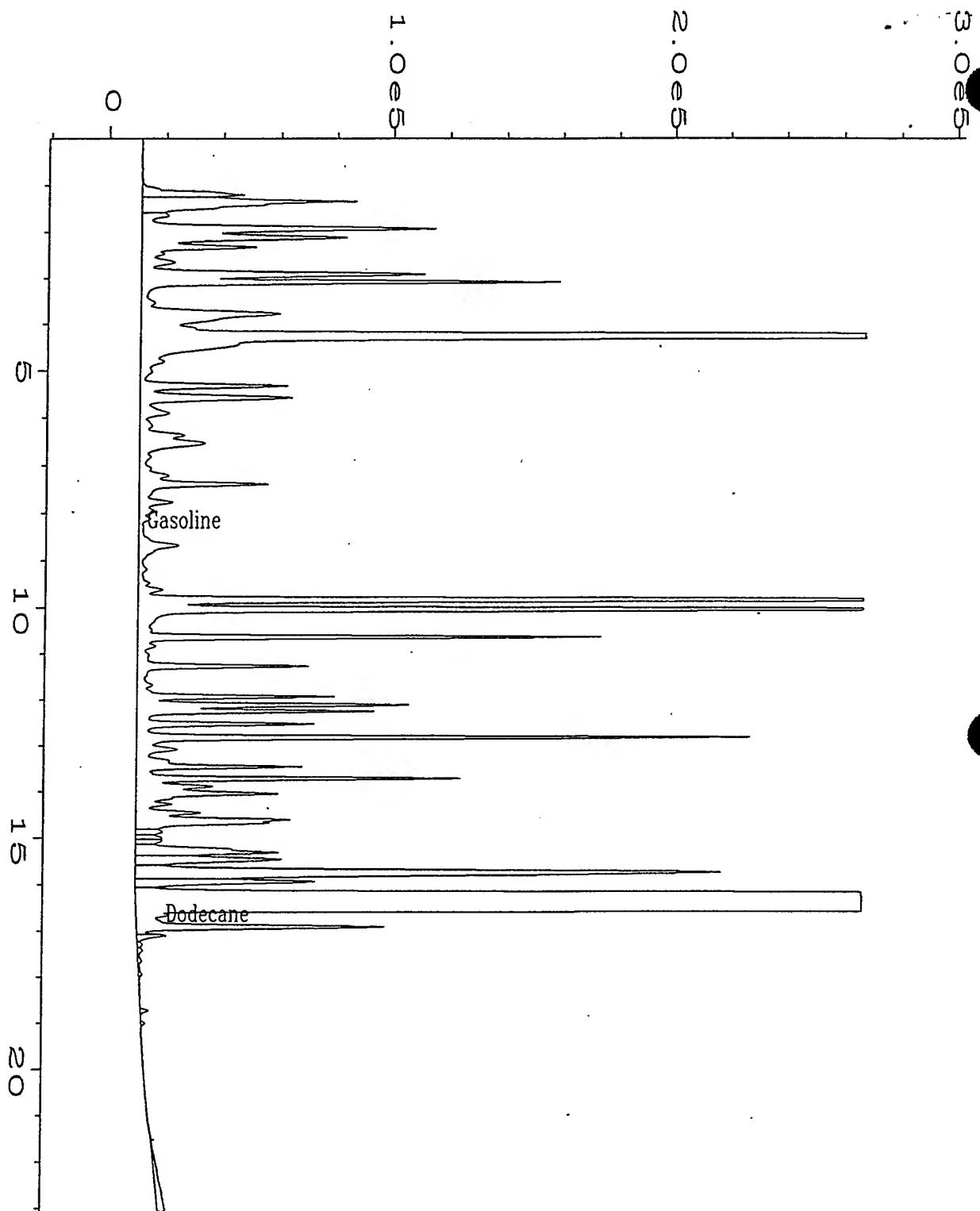
|                    |                                       |                    |             |
|--------------------|---------------------------------------|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\021F0101.D | Page Number        | : 1         |
| Operator           | : S.W. Tyson                          | Vial Number        | : 21        |
| Instrument         | : TVH                                 | Injection Number   | : 1         |
| Sample Name        | : X05931Dup;1                         | Sequence Line      | : 1         |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1B       |
| quired on          | : 02 May 95 02:53 AM                  | Analysis Method    | : TVH0501.M |
| Report Created on: | 02 May 95 08:03 AM                    | Sample Amount      | : 0         |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :           |
| Multiplier         | : 1                                   |                    |             |

MW-5



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\024F0101.D | Page Number       | : 1            |
| Operator           | : S.W. Tyson                          | Vial Number       | : 24           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05932;1                            | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 02 May 95 04:38 AM                  | Analysis Method   | : TVH0501.MTH  |
| Report Created on  | : 02 May 95 08:05 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

mw-8



|                    |                                       |                   |              |
|--------------------|---------------------------------------|-------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\026F0101.D | Page Number       | : 1          |
| Operator           | : S.W. Tyson                          | Vial Number       | : 26         |
| Instrument         | : TVH                                 | Injection Number  | : 1          |
| Sample Name        | : X05933;1                            | Sequence Line     | : 1          |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BAS.MT |
| Acquired on        | : 02 May 95 05:48 AM                  | Analysis Method   | : TVH0501.MT |
| Report Created on: | 02 May 95 07:45 AM                    | Sample Amount     | : 0          |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :            |
| Multiplier         | : 1                                   |                   |              |

MW-3

Evergreen Analytical, Inc.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
TVH Matrix Spike/Matrix Spike Duplicate Data Report

|                   |           |                    |                      |
|-------------------|-----------|--------------------|----------------------|
| Client Sample No. | : MW-5    | Client Project No. | : 722450.2602        |
| Lab Sample No.    | : X05931  | Lab Project No.    | : 95-1264            |
| Date Sampled      | : 4/18/95 | EPA Method No.     | : 5030/8015 Modified |
| Date Received     | : 4/19/95 | Matrix             | : Water              |
| Date Prepared     | : 5/1/95  | Method Blank       | : MB050195           |
| Date Analyzed     | : 5/2/95  |                    |                      |

| Compound | Spike Added (mg/L) | Sample Concentration (mg/L) | MS Concentration (mg/L) | MS %REC | QC Limits %REC |
|----------|--------------------|-----------------------------|-------------------------|---------|----------------|
| Gasoline | 2.00               | 1.12                        | 2.99                    | 94%     | 60-140         |

| Compound | Spike Added (mg/L) | MSD Concentration (mg/L) | MSD %REC | RPD | QC Limits |        |
|----------|--------------------|--------------------------|----------|-----|-----------|--------|
|          |                    |                          |          |     | RPD       | %REC   |
| Gasoline | 2.00               | 3.30                     | 109%     | 15  | 50        | 60-140 |

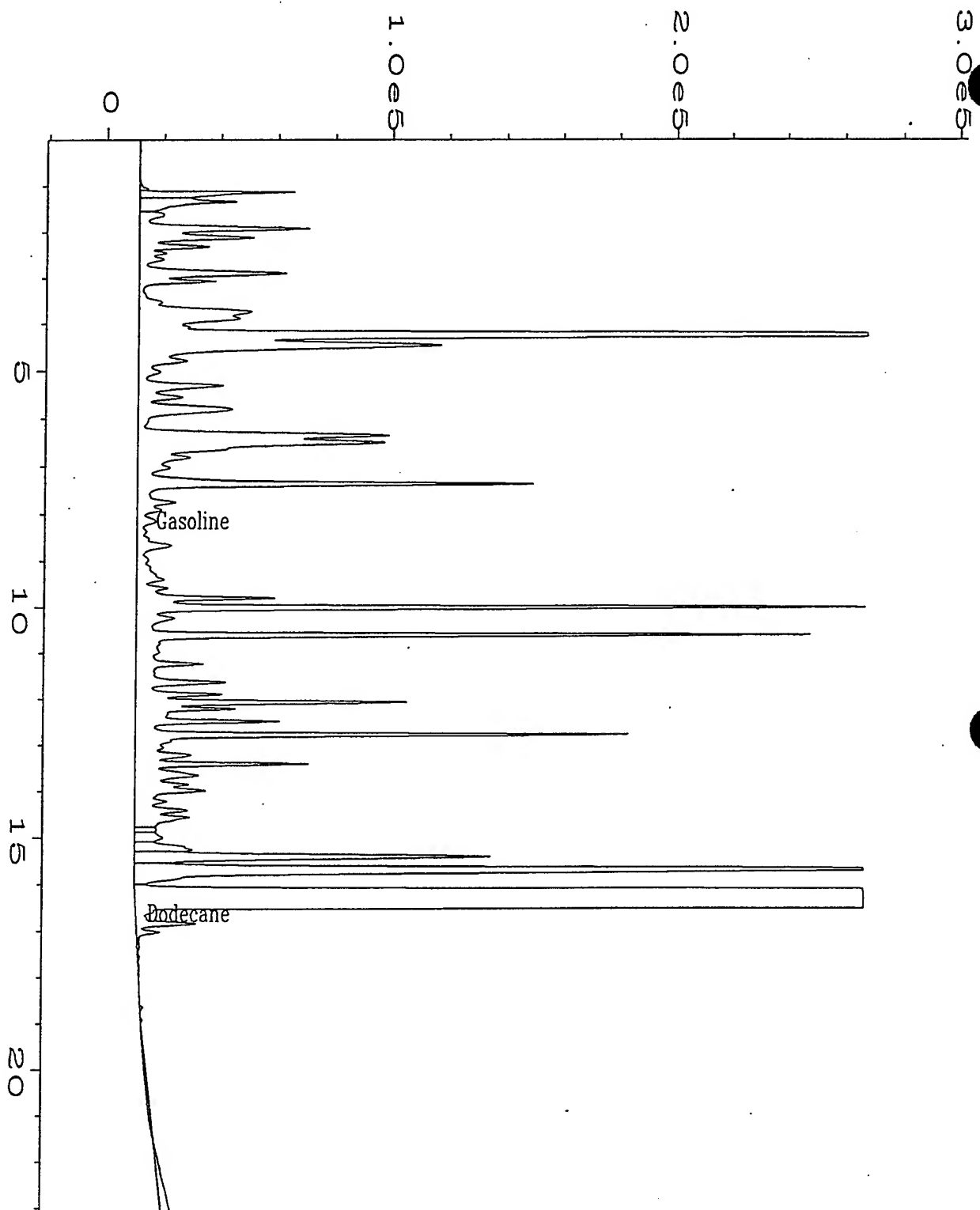
\* = Values outside of QC limits.

RPD: 0 out of (1) outside limits.  
Spike Recovery: 0 out of (2) outside limits.

NA = Not analyzed/not applicable.

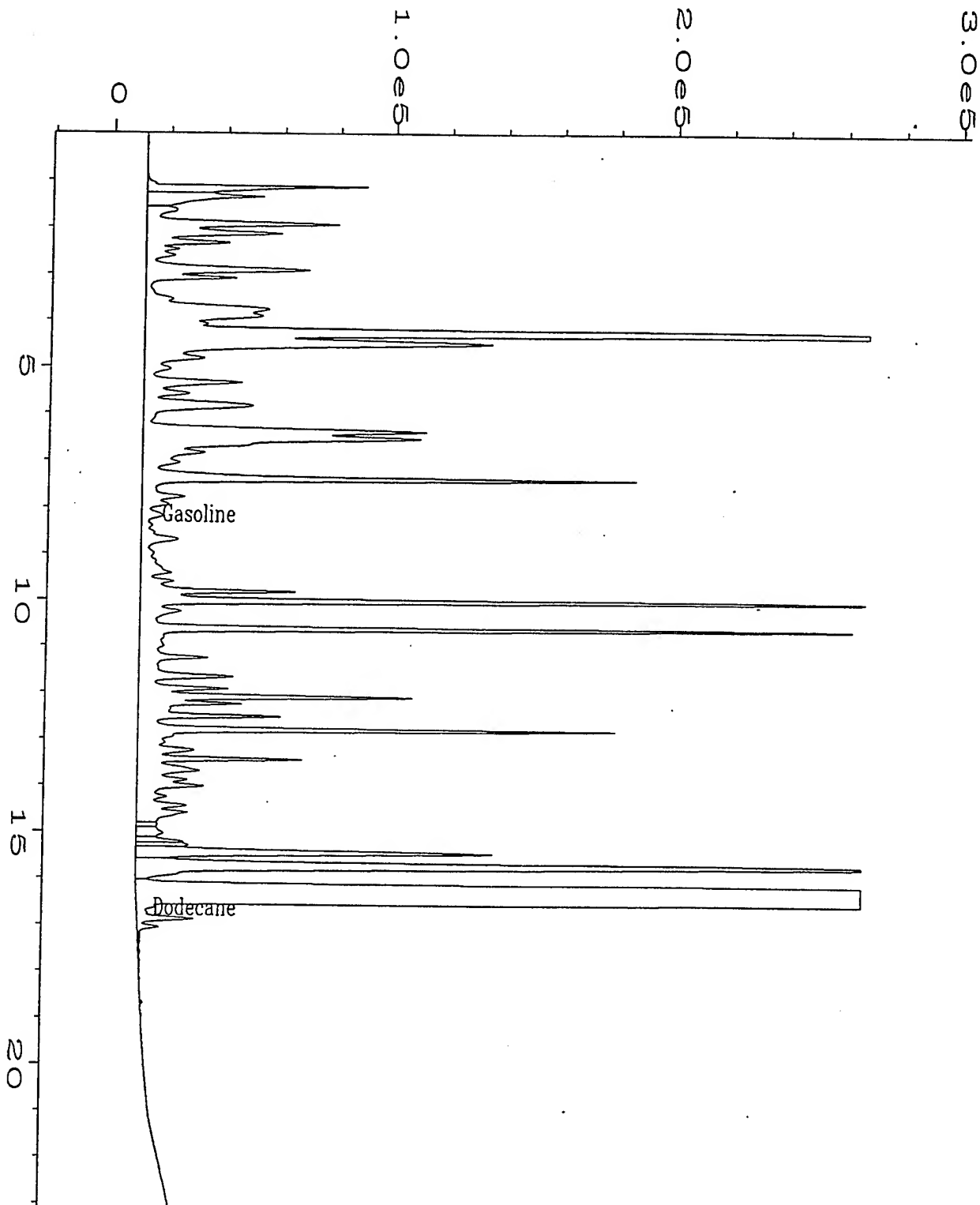
Comments:

*K. Bone*



|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\022F0101.D | Page Number        | : 1          |
| Operator           | : S.W. Tyson                          | Vial Number        | : 22         |
| Instrument         | : TVH                                 | Injection Number   | : 1          |
| Sample Name        | : X05931MS                            | Sequence Line      | : 1          |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BAS.MT   |
| Acquired on        | : 02 May 95 03:28 AM                  | Analysis Method    | : TVH0501.MT |
| Report Created on: | 02 May 95 08:04 AM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |

MWS MS



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\023F0101.D | Page Number       | : 1            |
| Operator           | : S.W. Tyson                          | Vial Number       | : 23           |
| Instrument         | : TVH                                 | Injection Number  | : 1            |
| Sample Name        | : X05931MSD                           | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : TVH1BASE.MTH |
| Acquired on        | : 02 May 95 04:03 AM                  | Analysis Method   | : TVH0501.MTH  |
| Report Created on  | : 02 May 95 08:04 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

MW 5 MSD

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

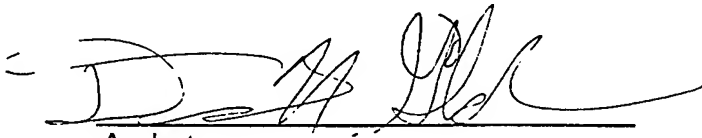
TOTAL VOLATILE HYDROCARBONS (TVH as Gasoline)  
Laboratory Control Sample (LCS)

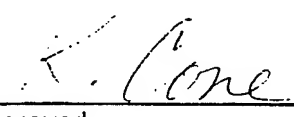
LCS Number : LCS050195      Matrix : WATER  
Date Prepared : 5/1/95      Method Numbers : EPA 5030/8015 Modified  
Date Analyzed : 5/1/95  
Sequence Number : TVH7

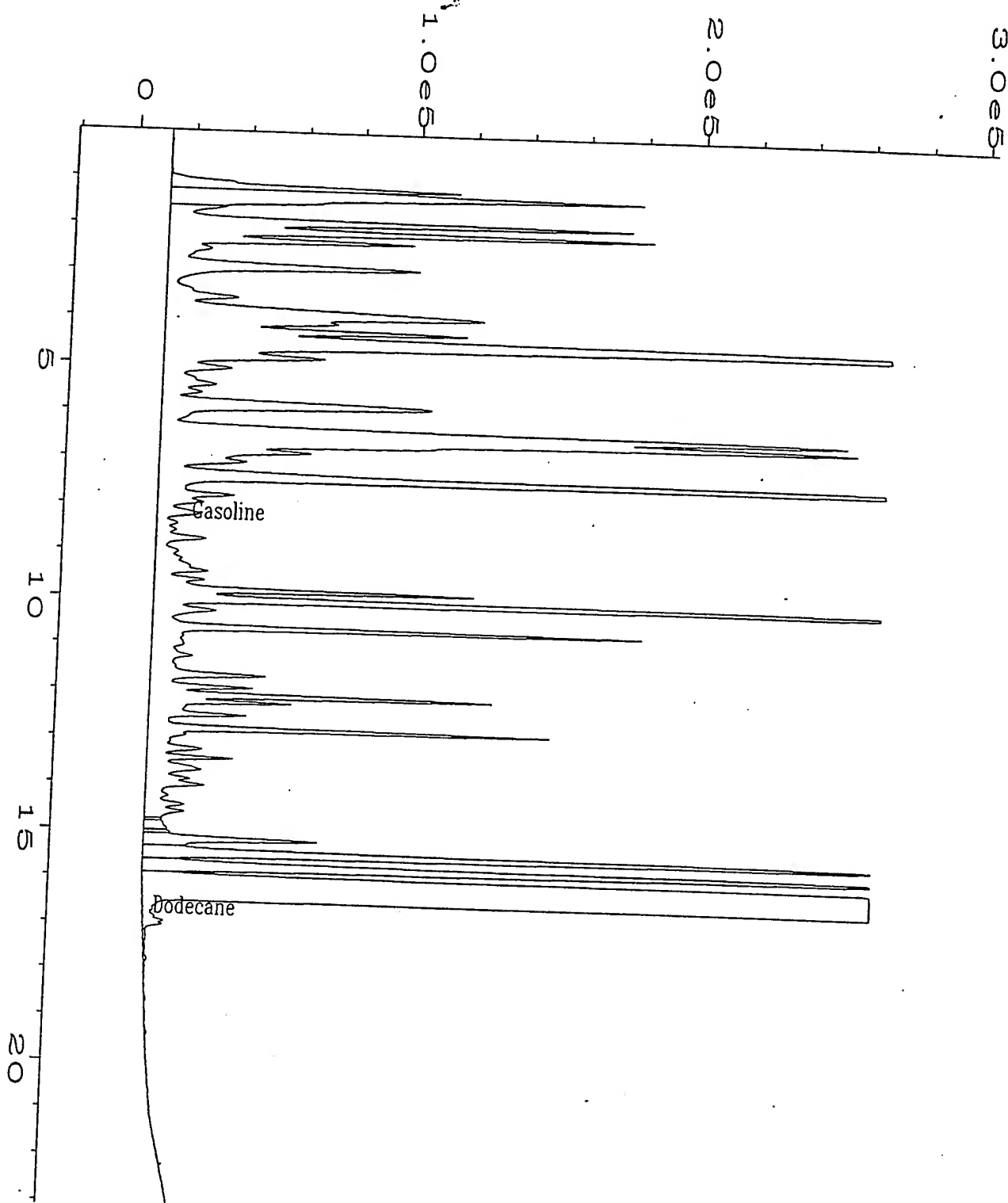
| <u>Compound<br/>Name</u> | <u>Theoretical<br/>Concentration<br/>mg/L</u> | <u>LCS<br/>Concentration<br/>mg/ L</u> | <u>LCS<br/>%<br/>Recovery</u> | <u>QC Limit<br/>% Recovery</u> |
|--------------------------|---|--|-------------------------------|--------------------------------|
| Gasoline                 | 5.00  | 5.11                                   | 102%                          | 70%-130%                       |

QUALIFIERS

U = TVH analyzed for but not detected.  
B = TVH as Gasoline found in blank also.  
E = Extrapolated value.  
NA = Not Available/Not Applicable.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\TVH0501\007F0101.D | Page Number        | : 1           |
| Operator           | : S.W. Tyson                          | Vial Number        | : 7           |
| Instrument         | : TVH                                 | Injection Number   | : 1           |
| Sample Name        | : LCS050195                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | TVH1BASE.MTH  |
| Created on         | : 01 May 95 06:44 PM                  | Analysis Method    | : TVH0501.MTH |
| Print Created on:  | 01 May 95 07:08 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 01 May 95 05:39 PM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL EXTRACTABLE HYDROCARBONS  
JET FUEL

|               |           |                       |                 |
|---------------|-----------|-----------------------|-----------------|
| Date Sampled  | : 4/18/95 | Client Project Number | : 722450.2602   |
| Date Received | : 4/19/95 | Lab Project Number    | : 95-1264       |
| Date Prepared | : 4/20/95 | Matrix                | : Water         |
| Date Analyzed | : 4/21/95 | Method Number         | : 3500/Mod.8015 |

| Evergreen<br>Sample # | Client<br>Sample # | Surrogate<br>Recovery | TEH<br>mg/L | RL<br>mg/L |
|-----------------------|--------------------|-----------------------|-------------|------------|
| WB042095              | WATER METHOD BLANK | 89%                   | U           | 0.5        |
| X05922                | CPT-17             | 61%                   | 1.3         | 0.5        |
| X05922-R              | CPT-17             | 60%                   | 1.2         | 0.5        |
| X05923                | CPT-18             | 81%                   | 1.8         | 0.5        |
| X05925                | CPT-19             | 82%                   | U           | 0.5        |
| X05926                | MW-4               | 109%                  | 8.2         | 0.5        |
| X05927                | MW-4 DUP           | 106%                  | 7.3         | 0.5        |
| X05928                | MW-12D             | 75%                   | U           | 0.5        |
| X05931                | MW-5               | 76%                   | 1.4         | 0.5        |
| X05932                | MW-8               | 45%                   | 2.5         | 0.5        |
| X05932-R              | MW-8               | 43%                   | 2.4         | 0.5        |
| X05933                | MW-3               | 46%                   | 2.6         | 0.5        |
| X05933-R              | MW-3               | 68%                   | 2.8         | 0.5        |

R = Second run.


QUALIFIERS

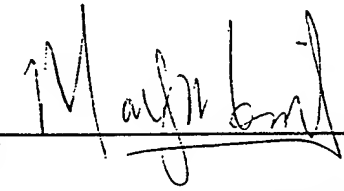
U = TEH analyzed for but not detected.

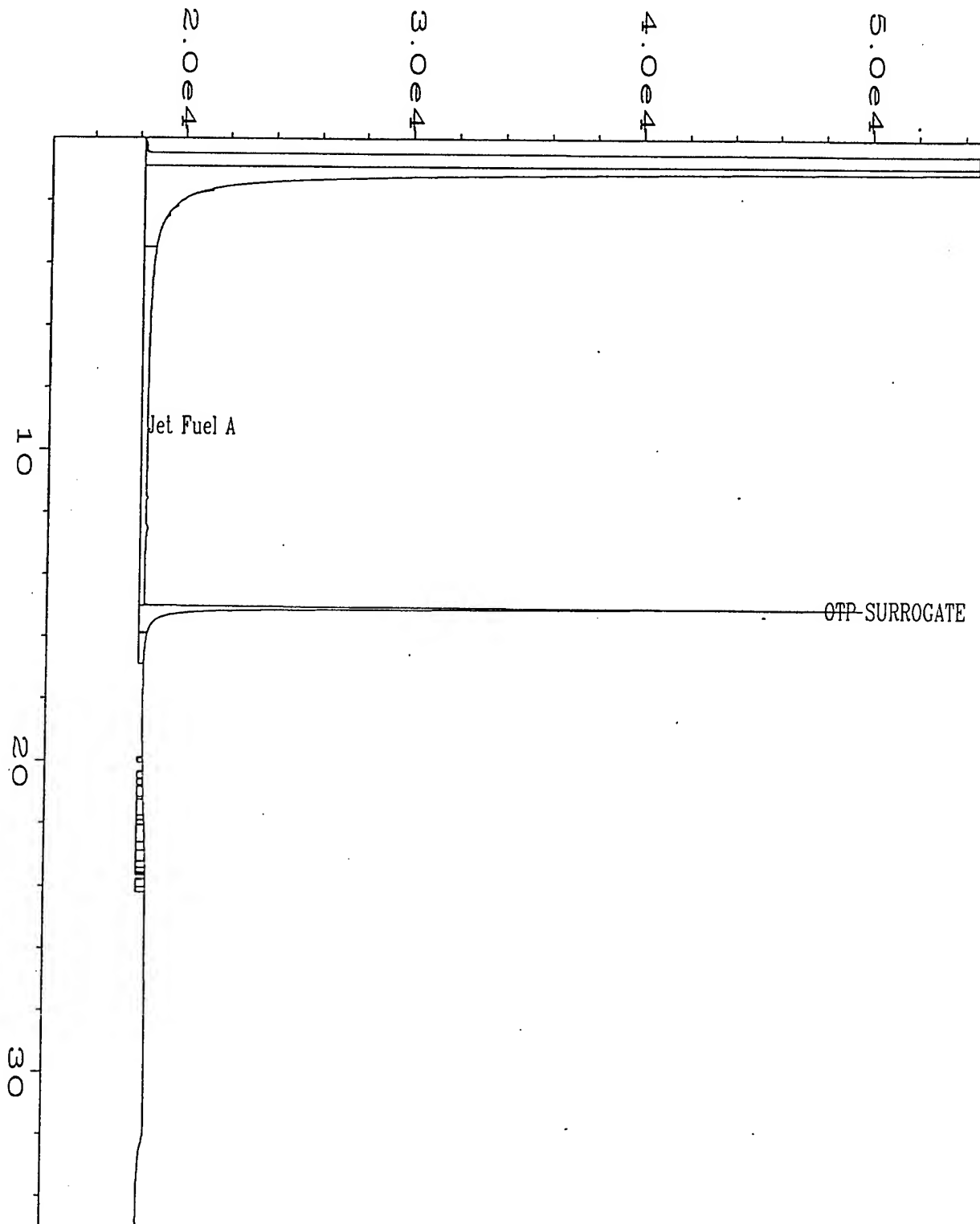
B = TEH found in blank.

E = Extrapolated value.

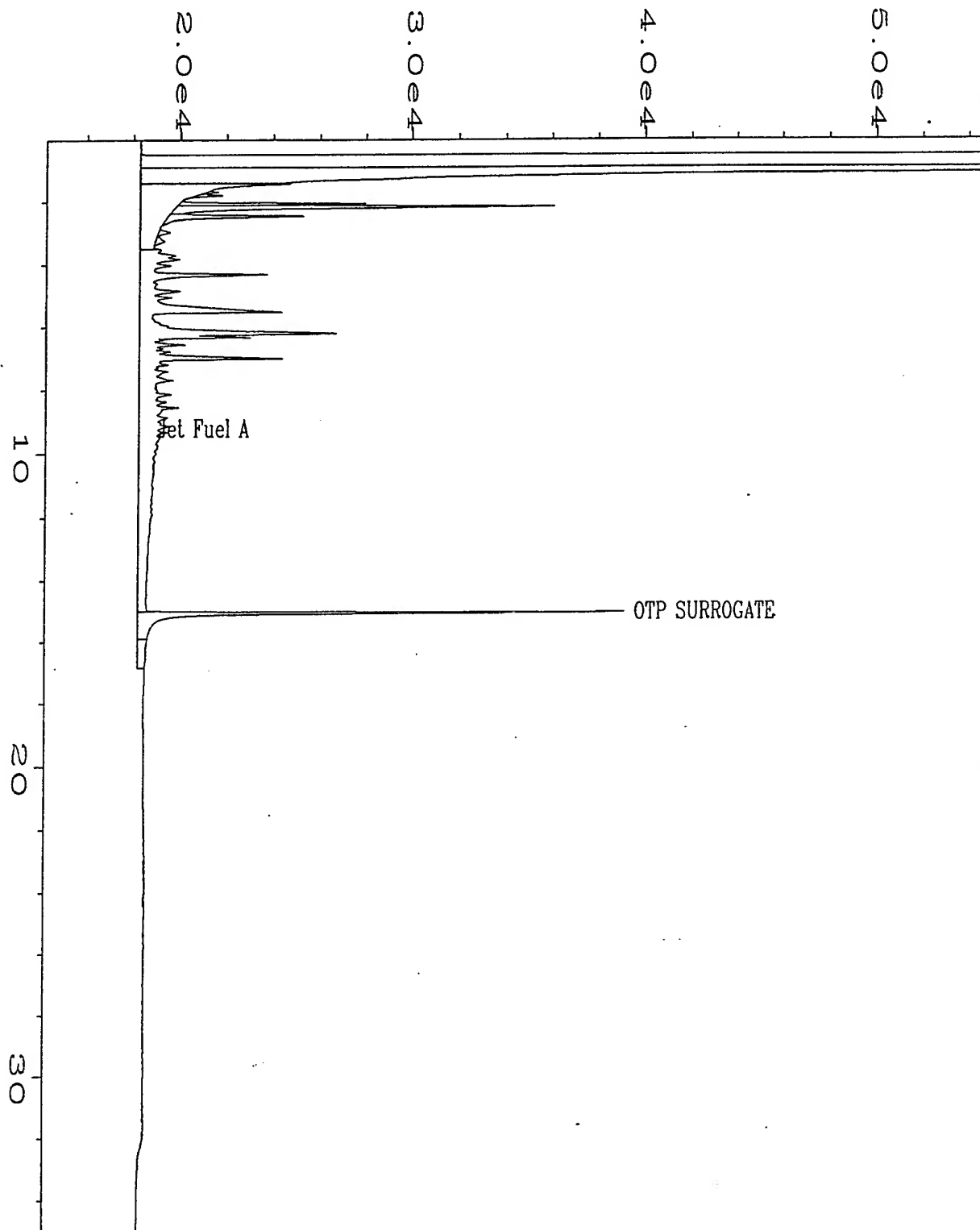
RL = Reporting Limit

  
Analyst

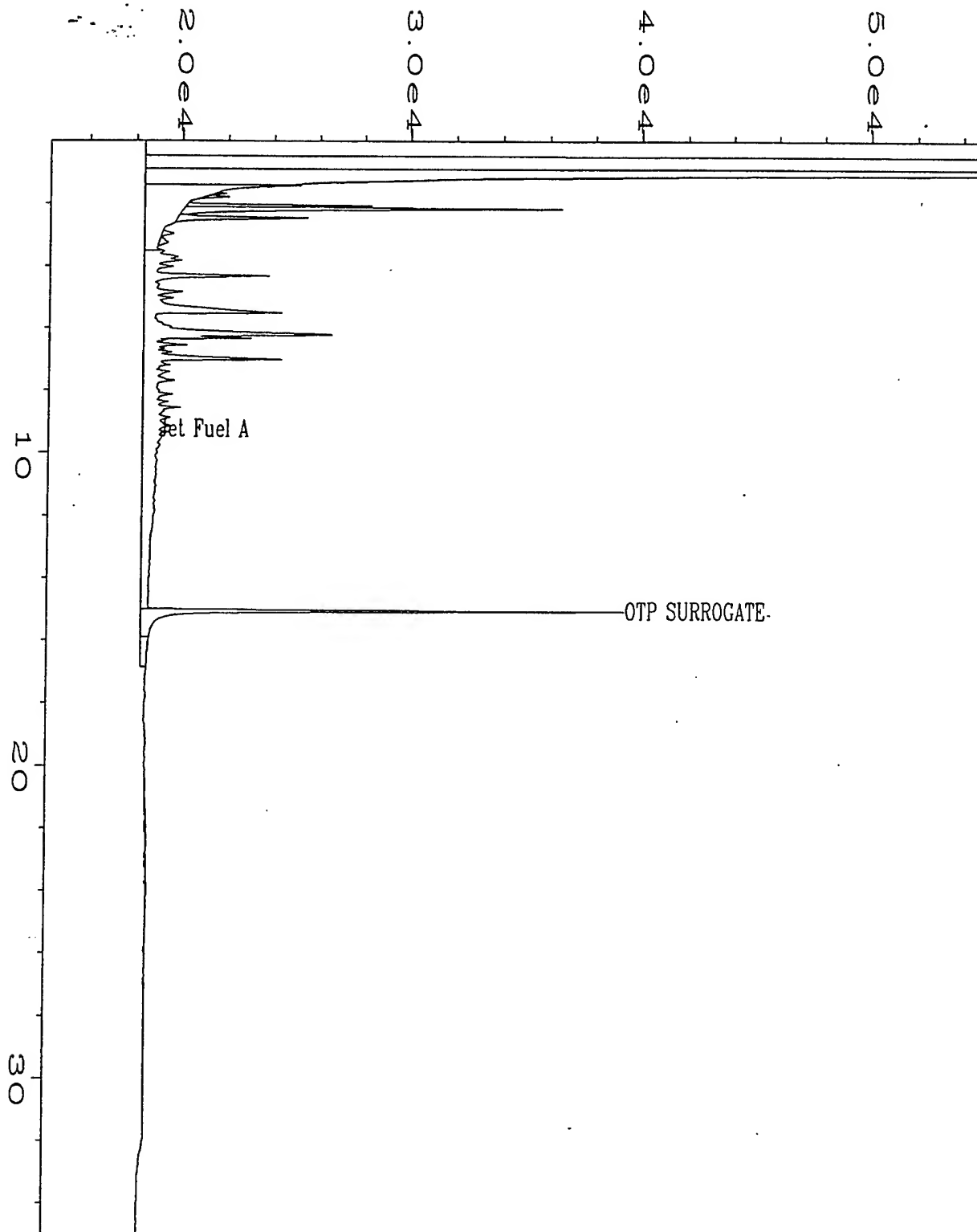
  
Approved



|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\016R0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 16          |
| Instrument         | : TEH                                 | Injection Number   | : 1           |
| Sample Name        | : WB042095                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | FID1BASE.MTH  |
| quired on          | : 21 Apr 95 01:52 AM                  | Analysis Method    | : JET0420.MTH |
| Report Created on: | 21 Apr 95 09:33 AM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

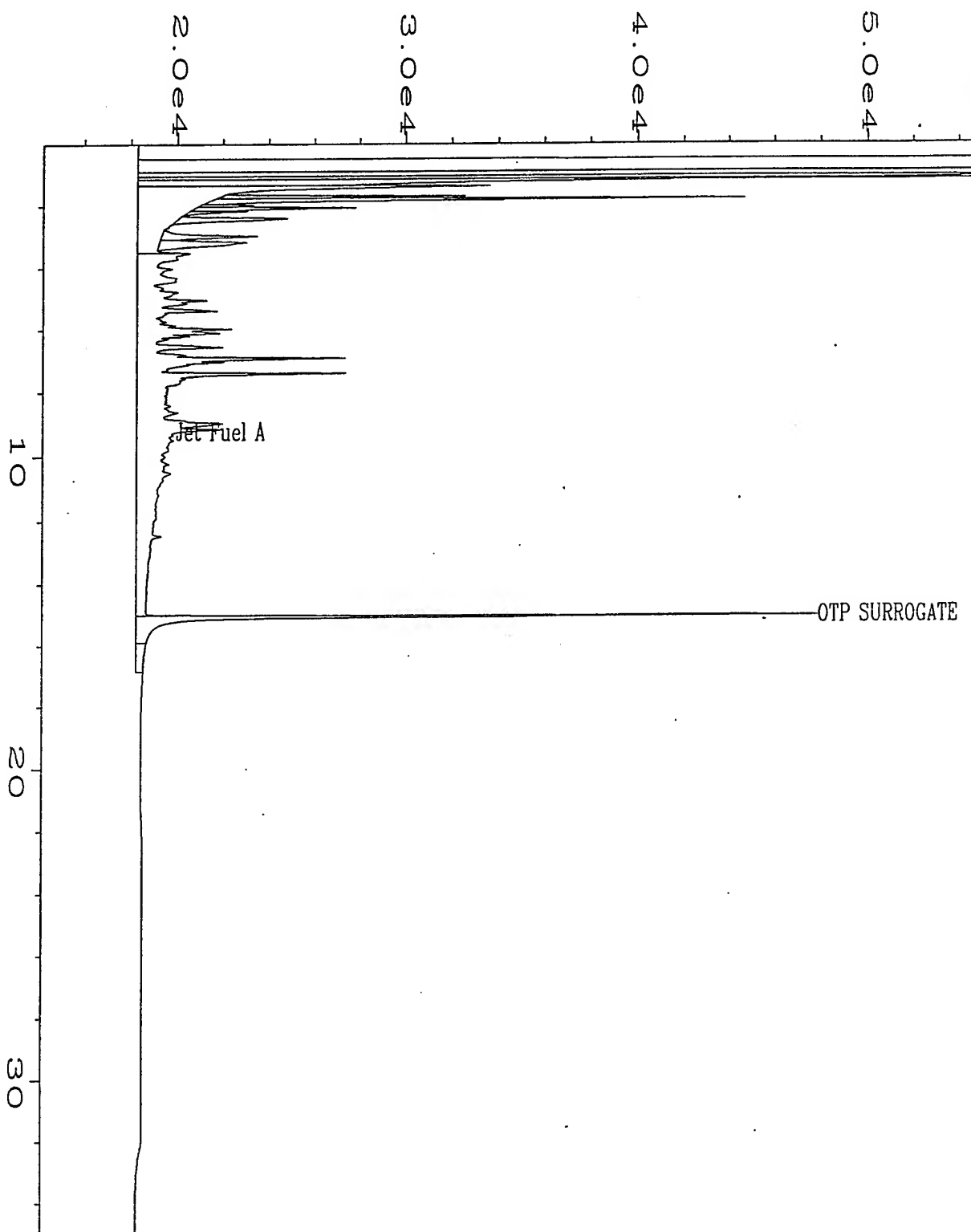


|                    |                                       |                    |              |
|--------------------|---------------------------------------|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\018R0101.D | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 18         |
| Instrument         | : TEH                                 | Injection Number   | : 1          |
| Sample Name        | : X05922 DF=1                         | Sequence Line      | : 1          |
| Run Time Bar Code: |                                       | Instrument Method: | FID1BASE.MT  |
| Acquired on        | : 21 Apr 95 03:25 AM                  | Analysis Method    | : JET0420.TH |
| Report Created on: | 21 Apr 95 03:52 PM                    | Sample Amount      | : 0          |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount        | :            |
| Multiplier         | : 1                                   |                    |              |

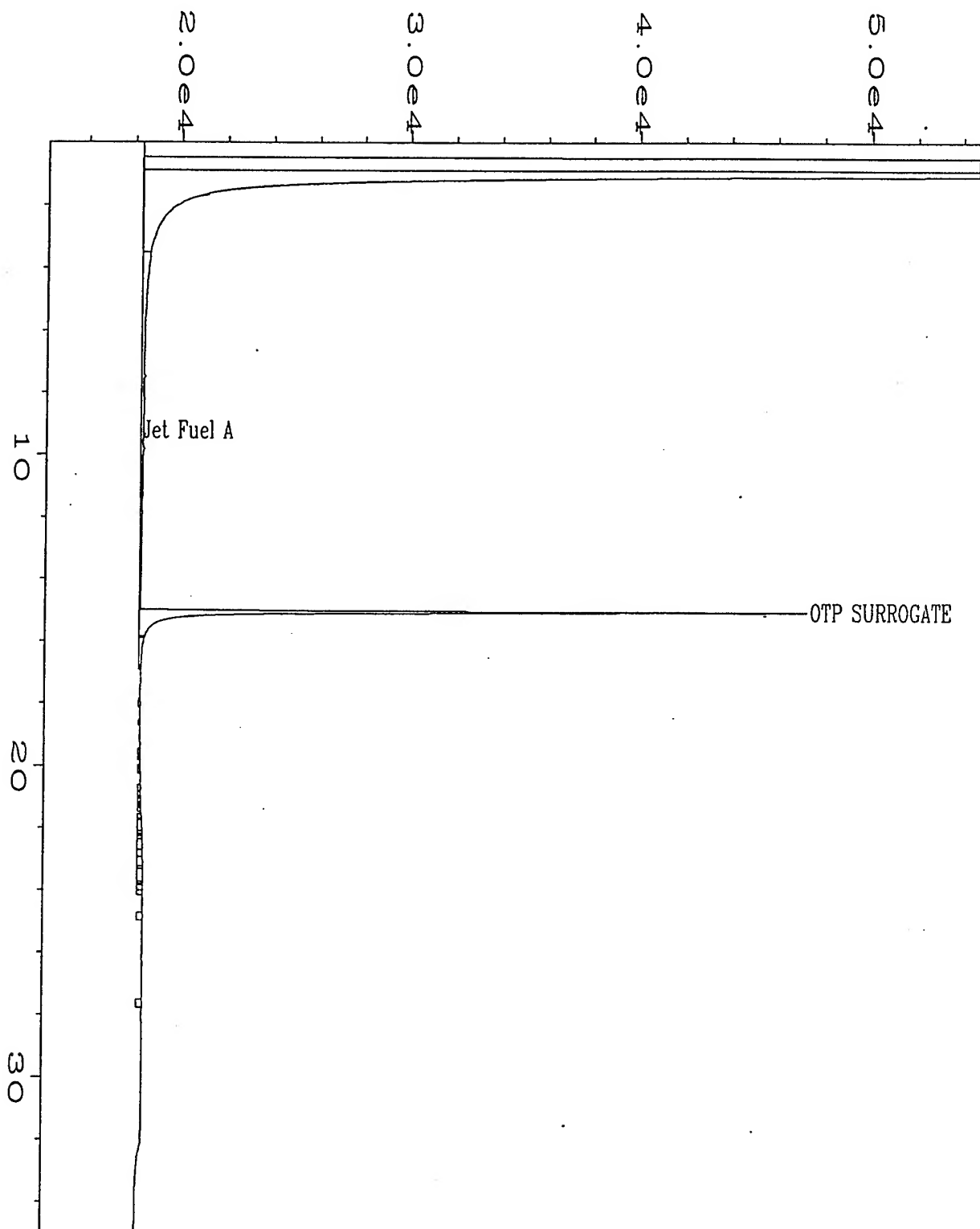


|                    |                                       |                    |               |
|--------------------|---------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\028R0101.D | Page Number        | : 1           |
| Operator           | : Dawn N. Guildner                    | Vial Number        | : 28          |
| Instrument         | : TEH                                 | Injection Number   | : 1           |
| Sample Name        | : X05922 DF=1                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                       | Instrument Method: | FID1BASE.MTH  |
| Printed on         | : 21 Apr 95 11:11 AM                  | Analysis Method    | : JET0420.MTH |
| Report Created on: | 21 Apr 95 03:20 PM                    | Sample Amount      | : 0           |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount        | :             |
| Multiplier         | : 1                                   |                    |               |

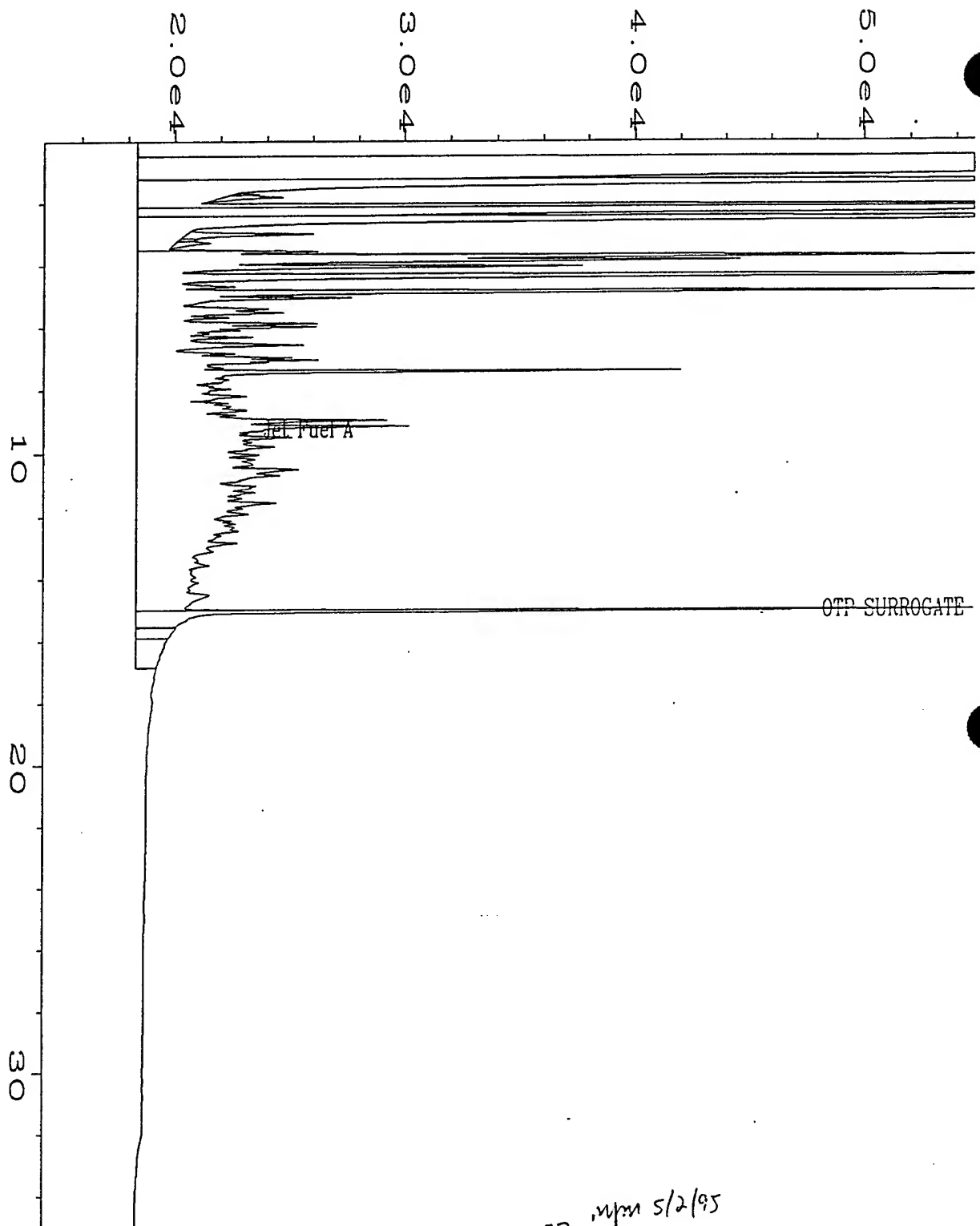
CPT-17 (Second Run)



|                    |   |                    |             |
|--------------------|---|--------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\020R0101.D     | Page Number        | : 1         |
| Operator           | : Dawn N. Guildner                        | Vial Number        | : 20        |
| Instrument         | : TEH                                     | Injection Number   | : 1         |
| Sample Name        | : X05923 DF=1                             | Sequence Line      | : 1         |
| Run Time Bar Code: |   | Instrument Method: | FID1BA.M    |
| quired on          | : 21 Apr 95 04:57 AM                      | Analysis Method    | : JET0420.M |
| port Created on:   | 21 Apr 95 10:22 AM                        | Sample Amount      | : 0         |
| Last Recalib on    | : 21 APR 95 09:09 AM                      | ISTD Amount        | :           |
| Multiplier         | : 1                                       |                    |             |
| Sample Info        | : PROJECT # 95-1264 CLIENT # CPT-18 WATER |                    |             |



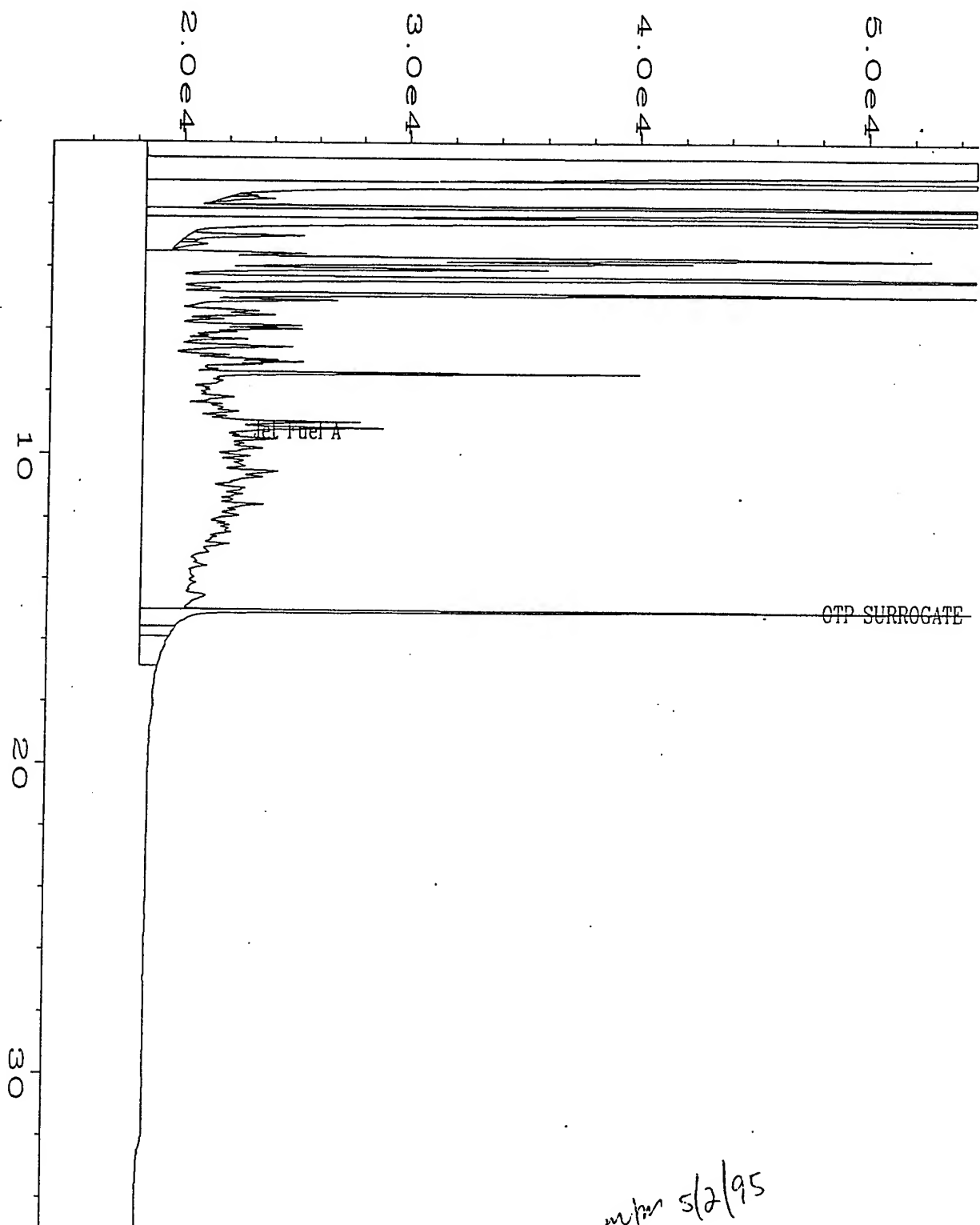
|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\021R0101.D     | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                        | Vial Number       | : 21           |
| Instrument         | : TEH                                     | Injection Number  | : 1            |
| Sample Name        | : X05925 DF=1                             | Sequence Line     | : 1            |
| Run Time Bar Code: |   | Instrument Method | : FID1BASE.MTF |
| quired on          | : 21 Apr 95 05:44 AM                      | Analysis Method   | : JET0420.MTH  |
| Report Created on: | : 21 Apr 95 10:22 AM                      | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                      | ISTD Amount       | :              |
| Multiplier         | : 1                                       |                   |                |
| Sample Info        | : PROJECT # 95-1264 CLIENT # CPT-19 WATER |                   |                |



22 *upm 5/2/95*

|                    |                                       |                   |             |
|--------------------|---------------------------------------|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\031R0101.D | Page Number       | : 1         |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 31        |
| Instrument         | : TEH                                 | Injection Number  | : 1         |
| Sample Name        | : X05926 DF=1                         | Sequence Line     | : 1         |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BA    |
| quired on          | : 21 Apr 95 01:32 PM                  | Analysis Method   | : JET0420.M |
| Report Created on: | 21 Apr 95 03:20 PM                    | Sample Amount     | : 0         |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount       | :           |
| Multiplier         | : 1                                   |                   |             |

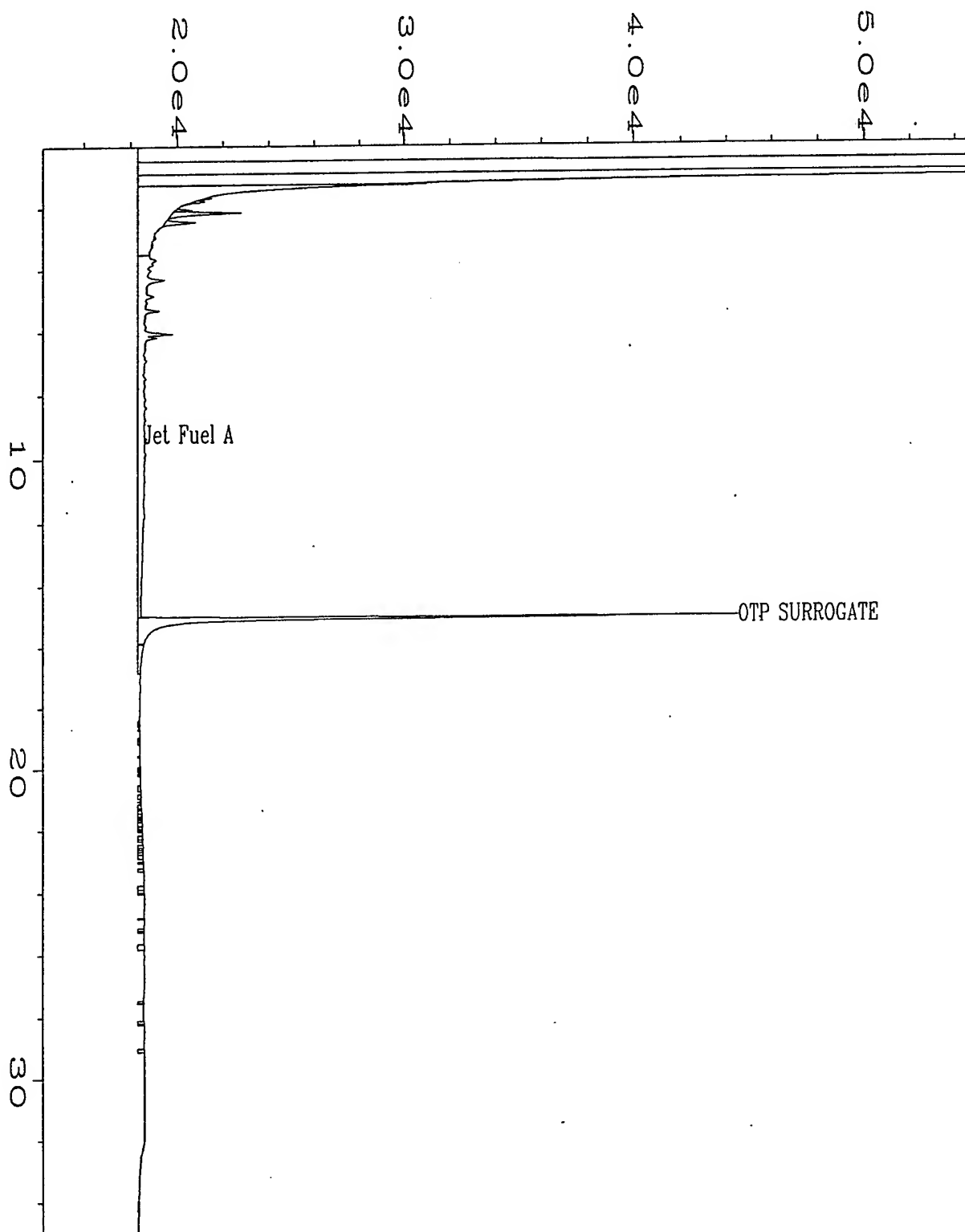
mw-4



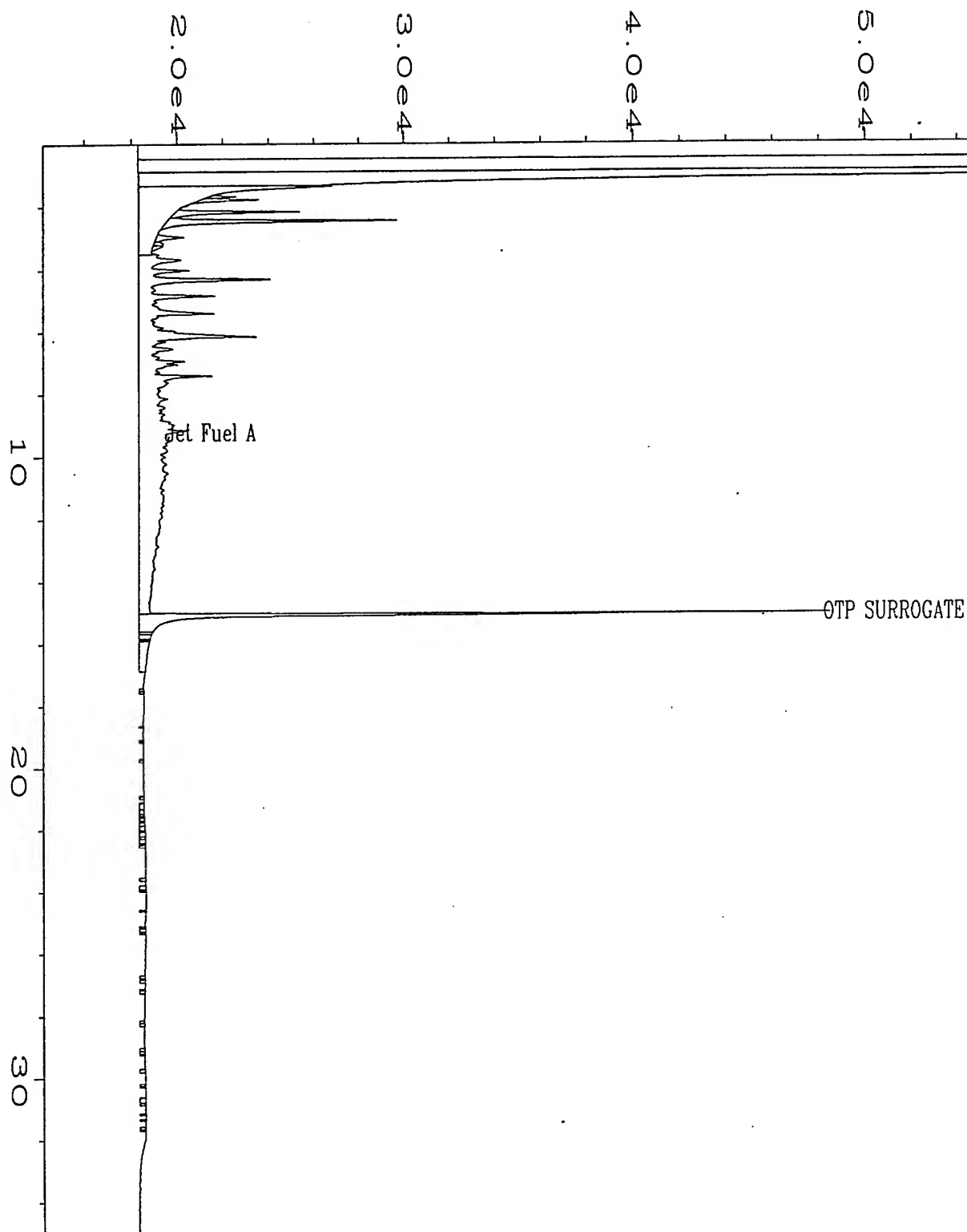
Data File Name : C:\HPCHEM\2\DATA\JET0420\032R0101.D  
 Operator : Dawn N. Guildner  
 Instrument : TEH  
 Sample Name : X05927 DF=1  
 Run Time Bar Code:  
 Acquired on : 21 Apr 95 02:19 PM  
 Report Created on: 21 Apr 95 03:20 PM  
 Last Recalib on : 21 APR 95 09:09 AM  
 Multiplier : 1

Page Number : 1  
 Vial Number : 32  
 Injection Number : 1  
 Sequence Line : 1  
 Instrument Method: FID1BASE.MTH  
 Analysis Method : JET0420.MTH  
 Sample Amount : 0  
 ISTD Amount :

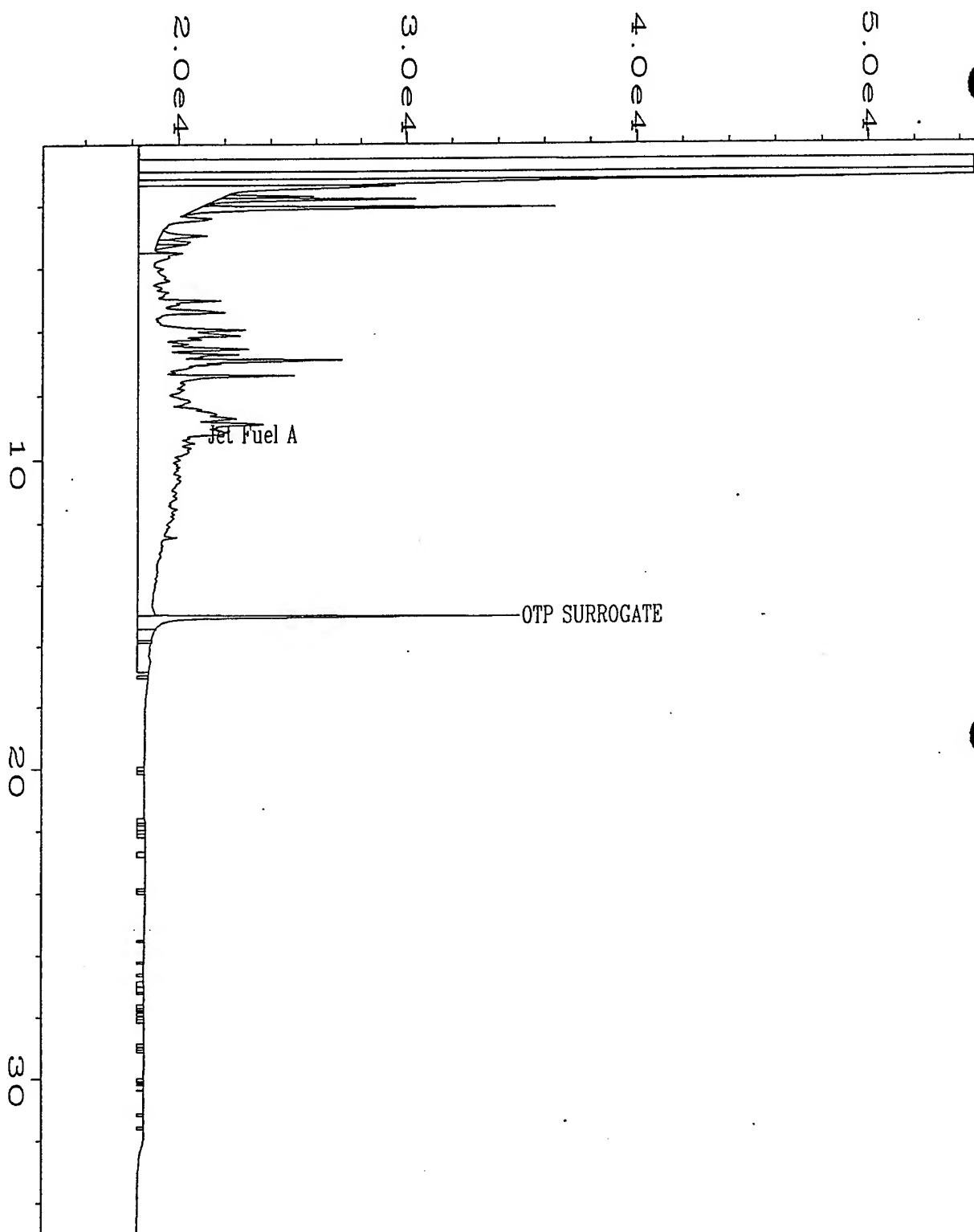
MW-4 DUPE



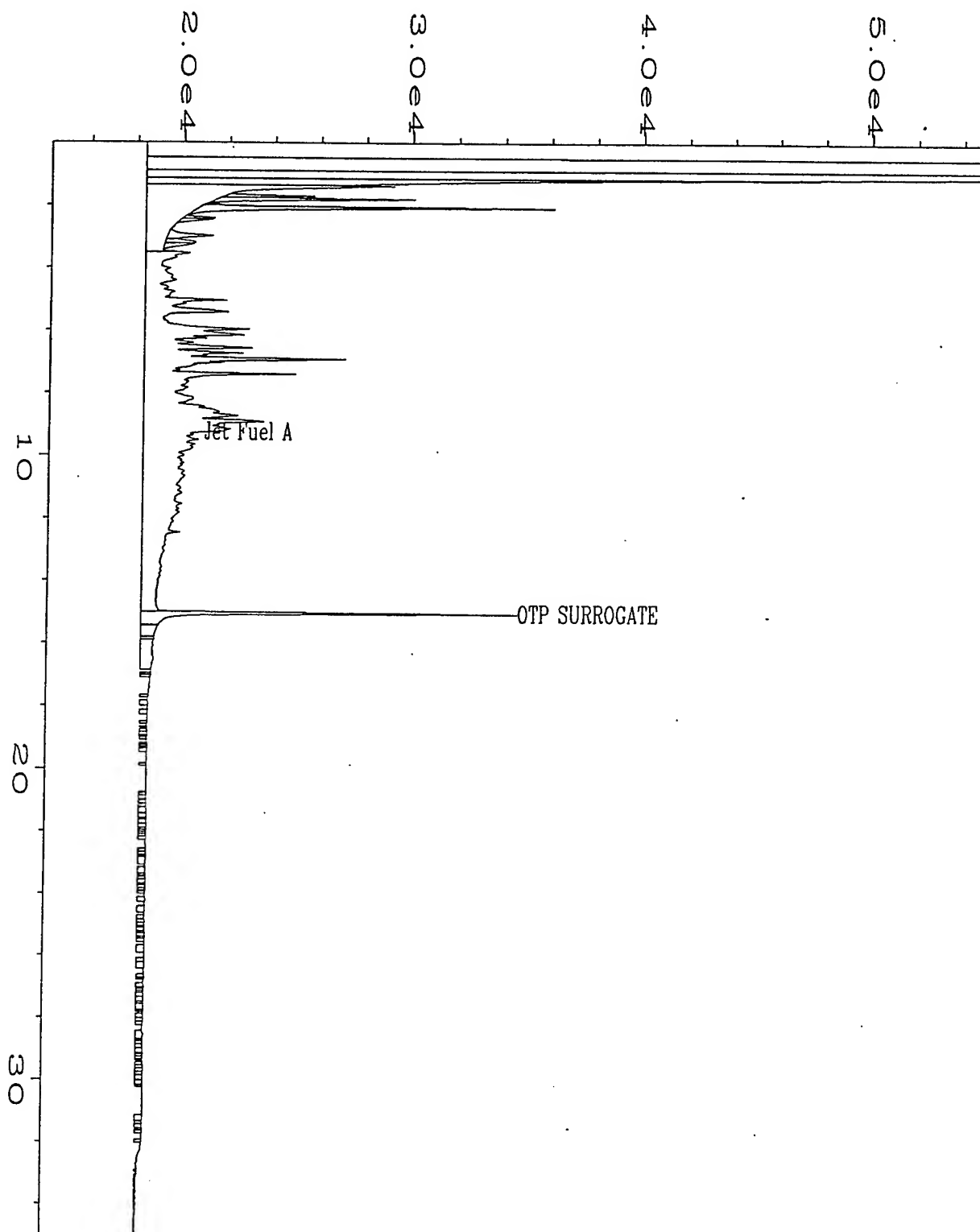
|                    |   |                    |              |
|--------------------|---|--------------------|--------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\024R0101.D     | Page Number        | : 1          |
| Operator           | : Dawn N. Guildner                        | Vial Number        | : 24         |
| Instrument         | : TEH                                     | Injection Number   | : 1          |
| Sample Name        | : X05928 DF=1                             | Sequence Line      | : 1          |
| Run Time Bar Code: |   | Instrument Method: | FID1BA       |
| quired on          | : 21 Apr 95 08:03 AM                      | Analysis Method    | : JET0420.MT |
| Report Created on: | 21 Apr 95 10:22 AM                        | Sample Amount      | : 0          |
| Last Recalib on    | : 21 APR 95 09:09 AM                      | ISTD Amount        | :            |
| Multiplier         | : 1                                       |                    |              |
| Sample Info        | : PROJECT # 95-1264 CLIENT # MW-12D WATER |                    |              |



|                    |   |                   |                |
|--------------------|---|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\025R0101.D   | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                      | Vial Number       | : 25           |
| Instrument         | : TEH                                   | Injection Number  | : 1            |
| Sample Name        | : X05931 DF=1                           | Sequence Line     | : 1            |
| Run Time Bar Code: |   | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 21 Apr 95 08:49 AM                    | Analysis Method   | : JET0420.MTH  |
| Report Created on: | : 21 Apr 95 10:22 AM                    | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                    | ISTD Amount       | :              |
| Multiplier         | : 1                                     |                   |                |
| Sample Info        | : PROJECT # 95-1264 CLIENT # MW-5 WATER |                   |                |

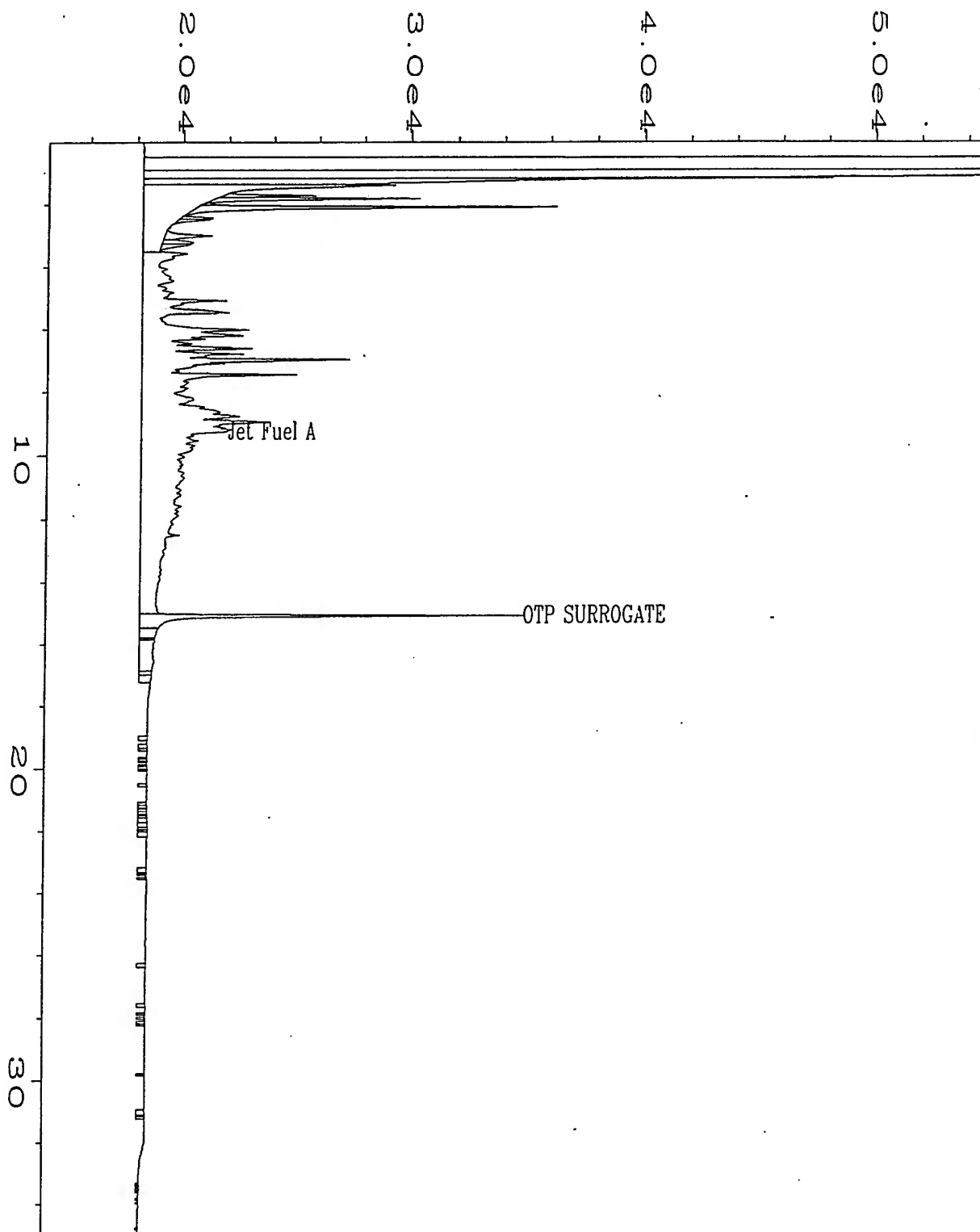


|                    |   |                   |             |
|--------------------|---|-------------------|-------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\026R0101.D   | Page Number       | : 1         |
| Operator           | : Dawn N. Guildner                      | Vial Number       | : 26        |
| Instrument         | : TEH                                   | Injection Number  | : 1         |
| Sample Name        | : X05932 DF=1                           | Sequence Line     | : 1         |
| Run Time Bar Code: |   | Instrument Method | : FID1BA    |
| quired on          | : 21 Apr 95 09:35 AM                    | Analysis Method   | : JET0420.M |
| Report Created on: | : 21 Apr 95 03:53 PM                    | Sample Amount     | : 0         |
| Last Recalib on    | : 21 APR 95 09:09 AM                    | ISTD Amount       | :           |
| Multiplier         | : 1                                     |                   |             |
| Sample Info        | : PROJECT # 95-1264 CLIENT # MW-8 WATER |                   |             |

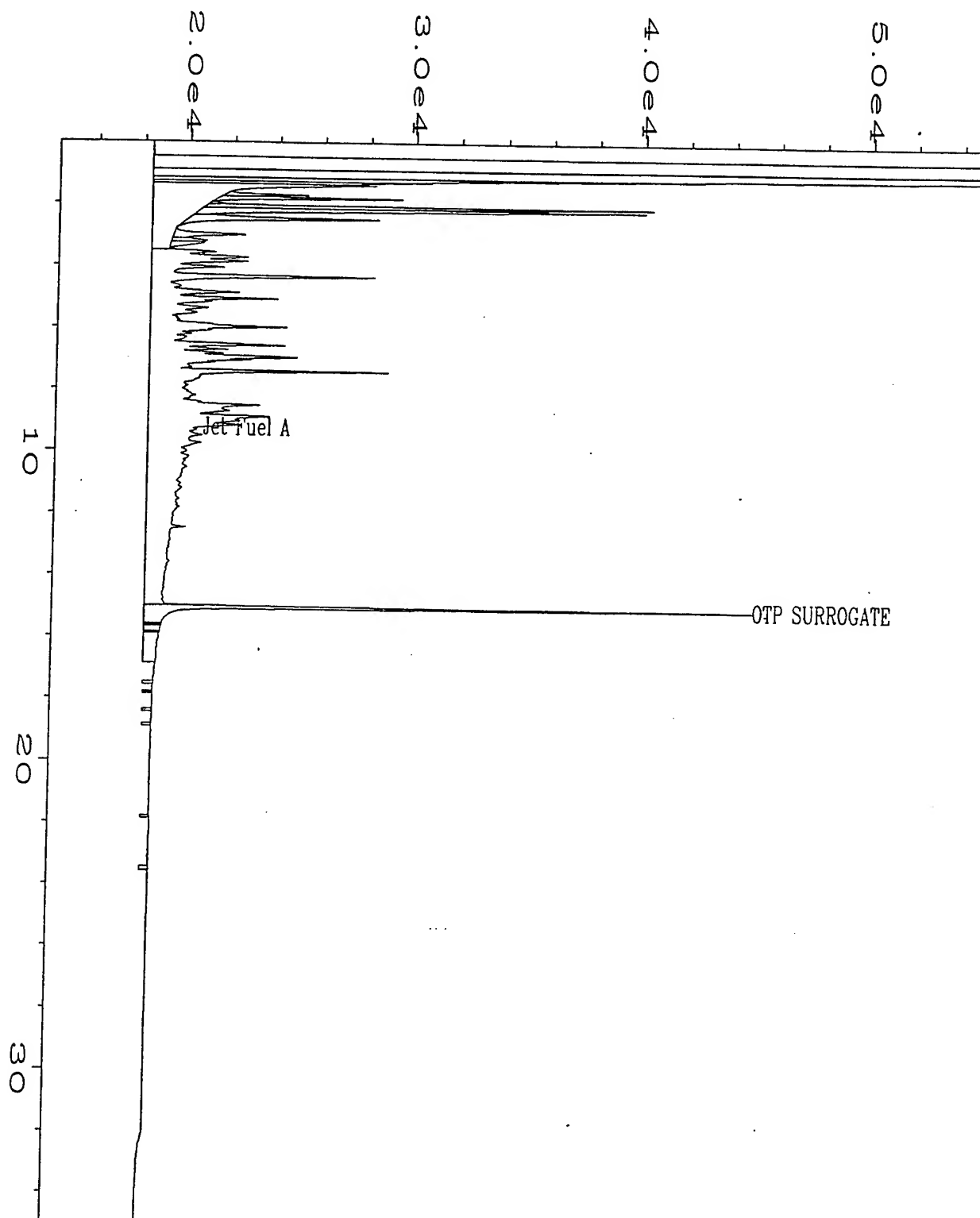


|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\029R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 29           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : X05932 DF=1                         | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 21 Apr 95 11:58 AM                  | Analysis Method   | : JET0420.MTH  |
| Report Created on  | : 21 Apr 95 03:20 PM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

MW-8 (Second Run)



|                    |   |                   |           |
|--------------------|---|-------------------|-----------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\027R0101.D   | Page Number       | : 1       |
| Operator           | : Dawn N. Guildner                      | Vial Number       | : 27      |
| Instrument         | : TEH                                   | Injection Number  | : 1       |
| Sample Name        | : X05933 DF=1                           | Sequence Line     | : 1       |
| Run Time Bar Code: |   | Instrument Method | : FID1BAS |
| Acquired on        | : 21 Apr 95 10:24 AM                    | Analysis Method   | : JET0420 |
| Report Created on  | : 21 Apr 95 03:53 PM                    | Sample Amount     | : 0       |
| Last Recalib on    | : 21 APR 95 09:09 AM                    | ISTD Amount       | :         |
| Multiplier         | : 1                                     |                   |           |
| Sample Info        | : PROJECT # 95-1264 CLIENT # MW-3 WATER |                   |           |



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\033R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 33           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : X05933 DF=1                         | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 21 Apr 95 03:06 PM                  | Analysis Method   | : JET0420.MTH  |
| Report Created on  | : 21 Apr 95 03:55 PM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

MW-3 (Second Run)

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield, Wheat Ridge, CO 80033  
(303) 425-6021

TOTAL EXTRACTABLE HYDROCARBONS (TEH)  
Laboratory Control Sample (LCS)

LCS Number : LCS042095      Matrix : WATER  
Date Prepared : 4/20/95      Method Number : 5030/MOD.8015  
Date Analyzed : 4/21/95  
Sequence Number : JET17

| <u>Compound Name</u> | <u>Theoretical Concentration mg/L</u> | <u>LCS Concentration mg/ L</u> | <u>LCS % Recovery</u> | <u>QC Limit % Recovery</u> |
|----------------------|---------------------------------------|--------------------------------|-----------------------|----------------------------|
| JET FUEL             | 1000                                  | 854                            | 85%                   | 70%-130%                   |

Surrogate Recovery (OTP): 81%


QUALIFIERS

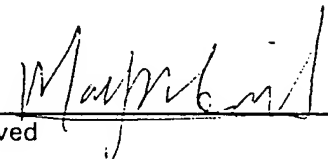
U = TEH analyzed for but not detected.

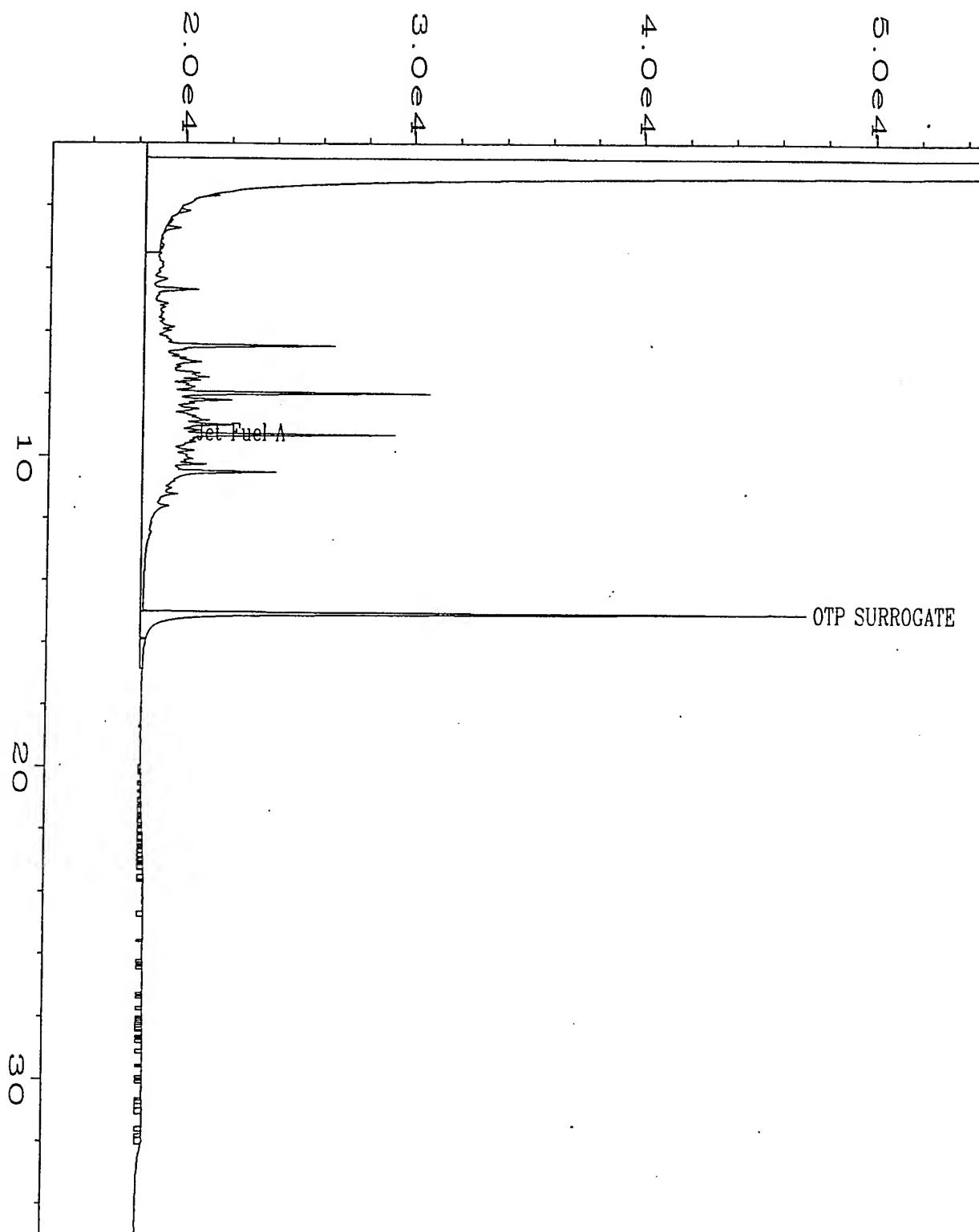
B = TEH found in blank as well as sample (blank data should be compared).

E = Extrapolated value.

NA=Not Available.

  
Analyst

  
Approved



|                    |                                       |                   |                |
|--------------------|---------------------------------------|-------------------|----------------|
| Data File Name     | : C:\HPCHEM\2\DATA\JET0420\017R0101.D | Page Number       | : 1            |
| Operator           | : Dawn N. Guildner                    | Vial Number       | : 17           |
| Instrument         | : TEH                                 | Injection Number  | : 1            |
| Sample Name        | : LCS042095                           | Sequence Line     | : 1            |
| Run Time Bar Code: |                                       | Instrument Method | : FID1BASE.MTH |
| Acquired on        | : 21 Apr 95 02:38 AM                  | Analysis Method   | : JET0420.MTH  |
| Report Created on  | : 21 Apr 95 09:34 AM                  | Sample Amount     | : 0            |
| Last Recalib on    | : 21 APR 95 09:09 AM                  | ISTD Amount       | :              |
| Multiplier         | : 1                                   |                   |                |

EVERGREEN ANALYTICAL, INC.  
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(303)425-6021

Methane Data Report

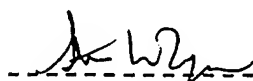
|               |            |                     |              |
|---------------|------------|---------------------|--------------|
| Date Sampled  | : 04/18/95 | Client Project No.: | 722450.2602  |
| Date Received | : 04/19/95 | Lab Project No.     | : 95-1264    |
| Date Prepared | : 05/02/95 | Dilution Factor     | : 1.00       |
| Date Analyzed | : 05/02/95 | Method              | : RSKSOP-175 |
|               |            | Matrix              | : Water      |

| Evergreen<br>Sample # | Client<br>Sample # | Matrix | Concentration<br>mg/L | EDL*<br>mg/L |
|-----------------------|--------------------|--------|-----------------------|--------------|
| -----                 | -----              | -----  | -----                 | -----        |
| MB050295              | Method Blank       | Water  | U                     | 0.004        |
| x05922                | CPT-17             | Water  | 0.12                  | 0.004        |
| x05923                | CPT-18             | Water  | 0.15                  | 0.004        |
| x05925                | CPT-19             | Water  | U                     | 0.004        |
| x05926                | MW-4               | Water  | U                     | 0.004        |
| x05928                | MW-12D             | Water  | 0.13                  | 0.004        |
| x05931                | MW-5               | Water  | 0.15                  | 0.004        |
| x05932                | MW-8               | Water  | 2.70                  | 0.02*        |
| x05933                | MW-3               | Water  | 1.92                  | 0.02*        |

\* DF=5 (100 ul of sample injected versus 500 ul for DF=1)

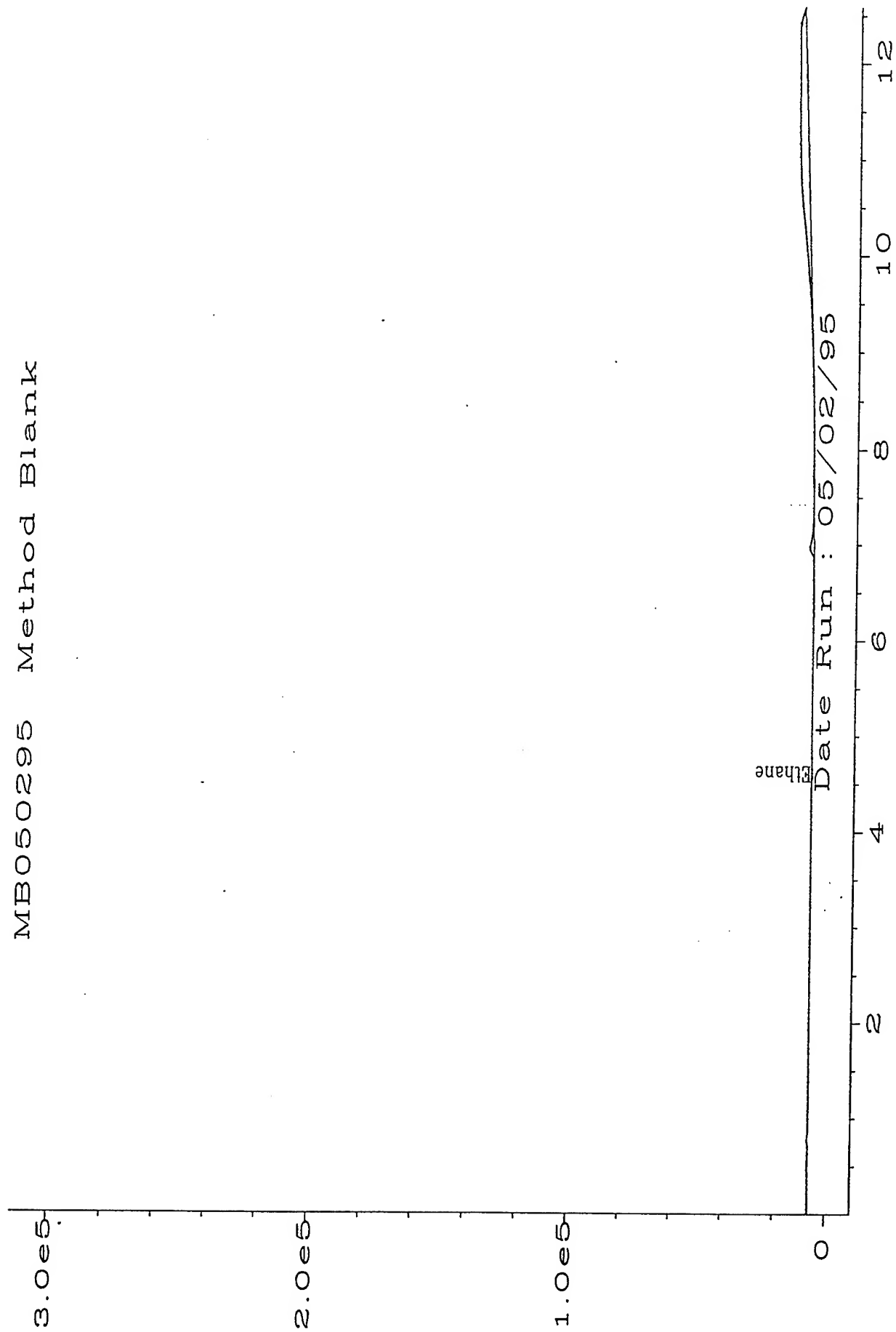
QUALIFIERS:

U = Compound analyzed for, but not detected above the  
Estimated Detection Limit.  
B = Compound also found in the blank, blank data should be  
compared.  
\* = Indicates the Estimated Detection Limit.  
E = Extrapolated value.

  
-----  
Analyst

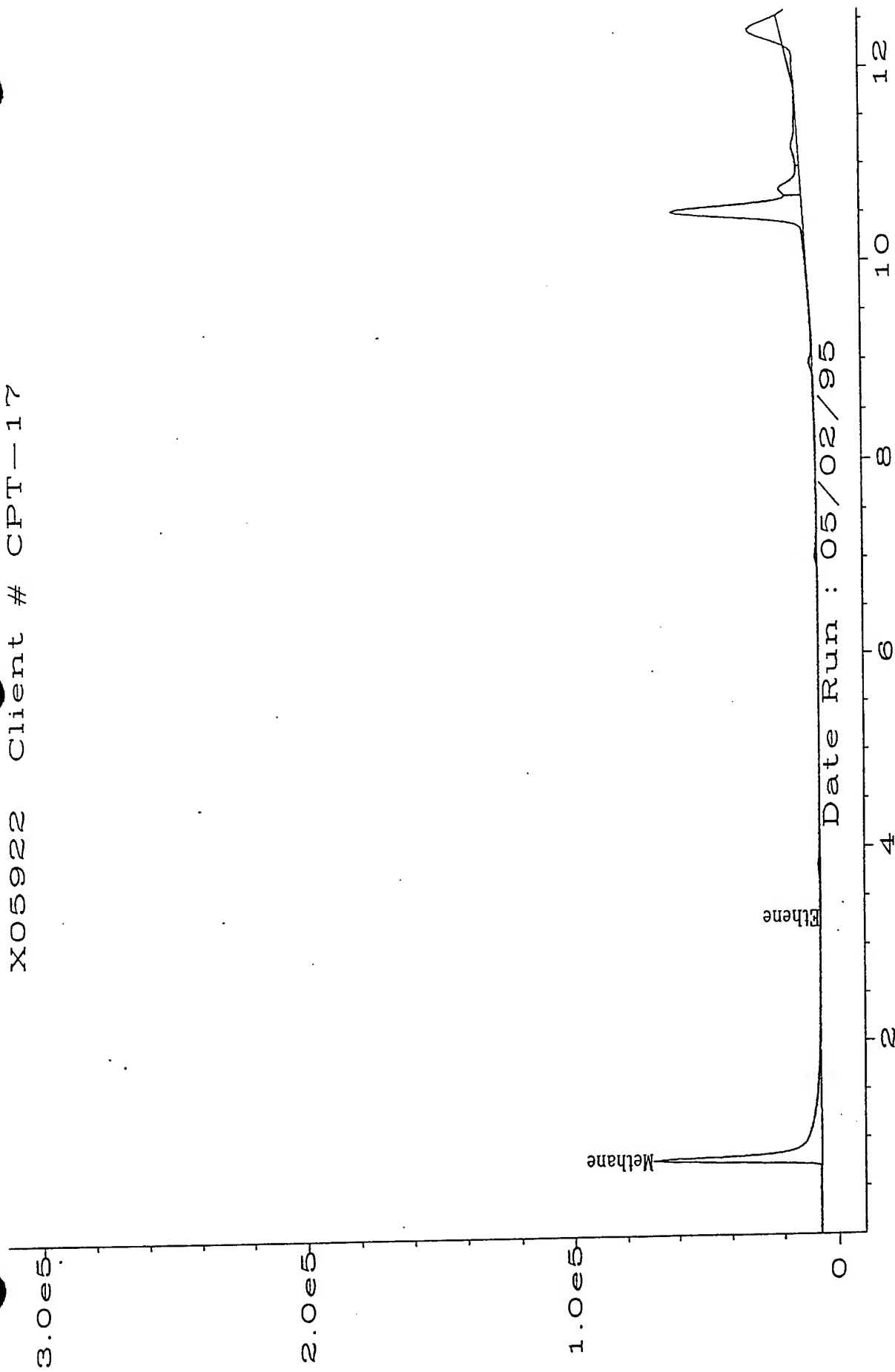
  
-----  
Approved

MB050295 Method Blank



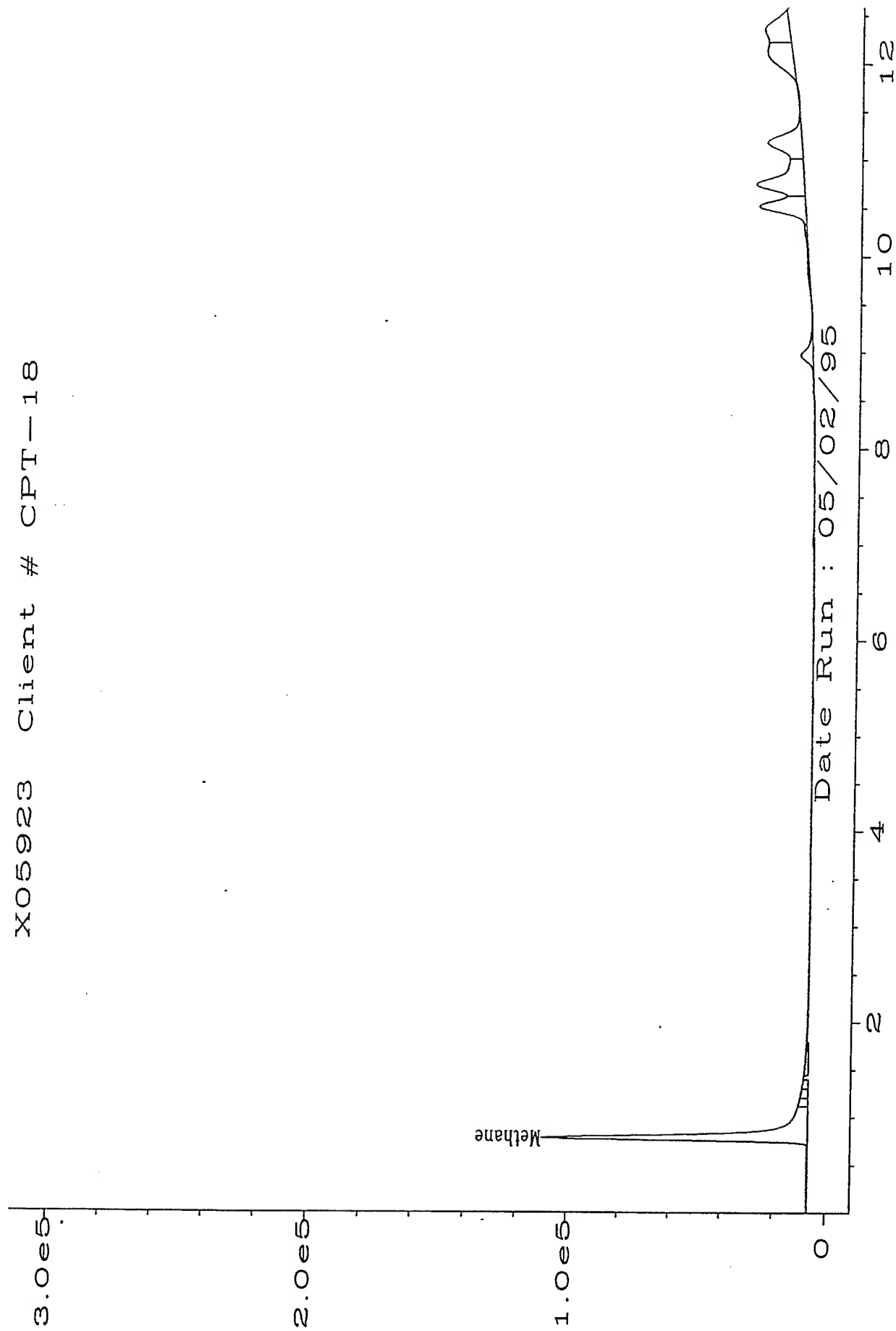
Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\003R0101.D

X05922 Client # CPT-17



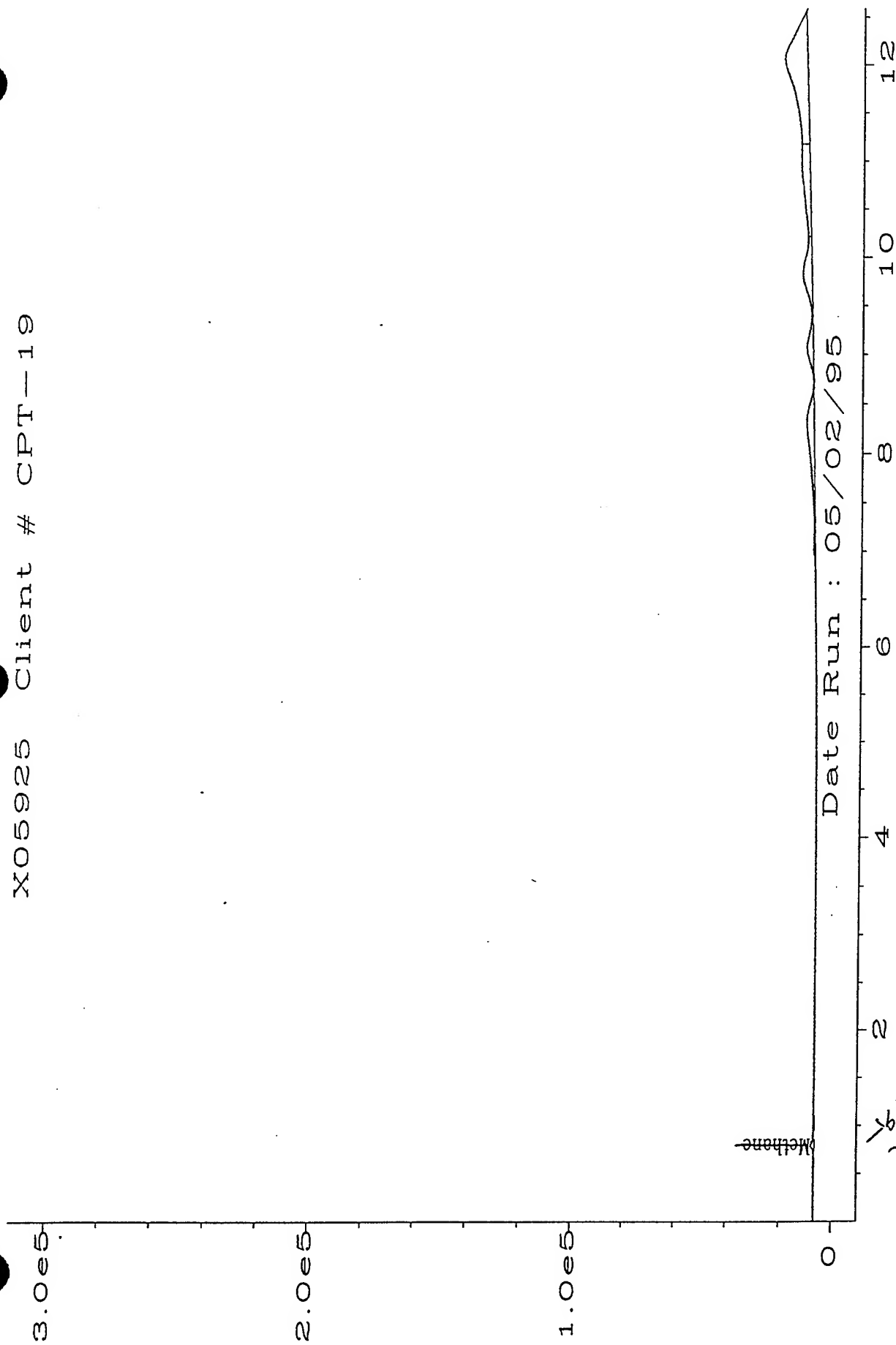
Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\004R0101.D

X05923 Client # CPT-18



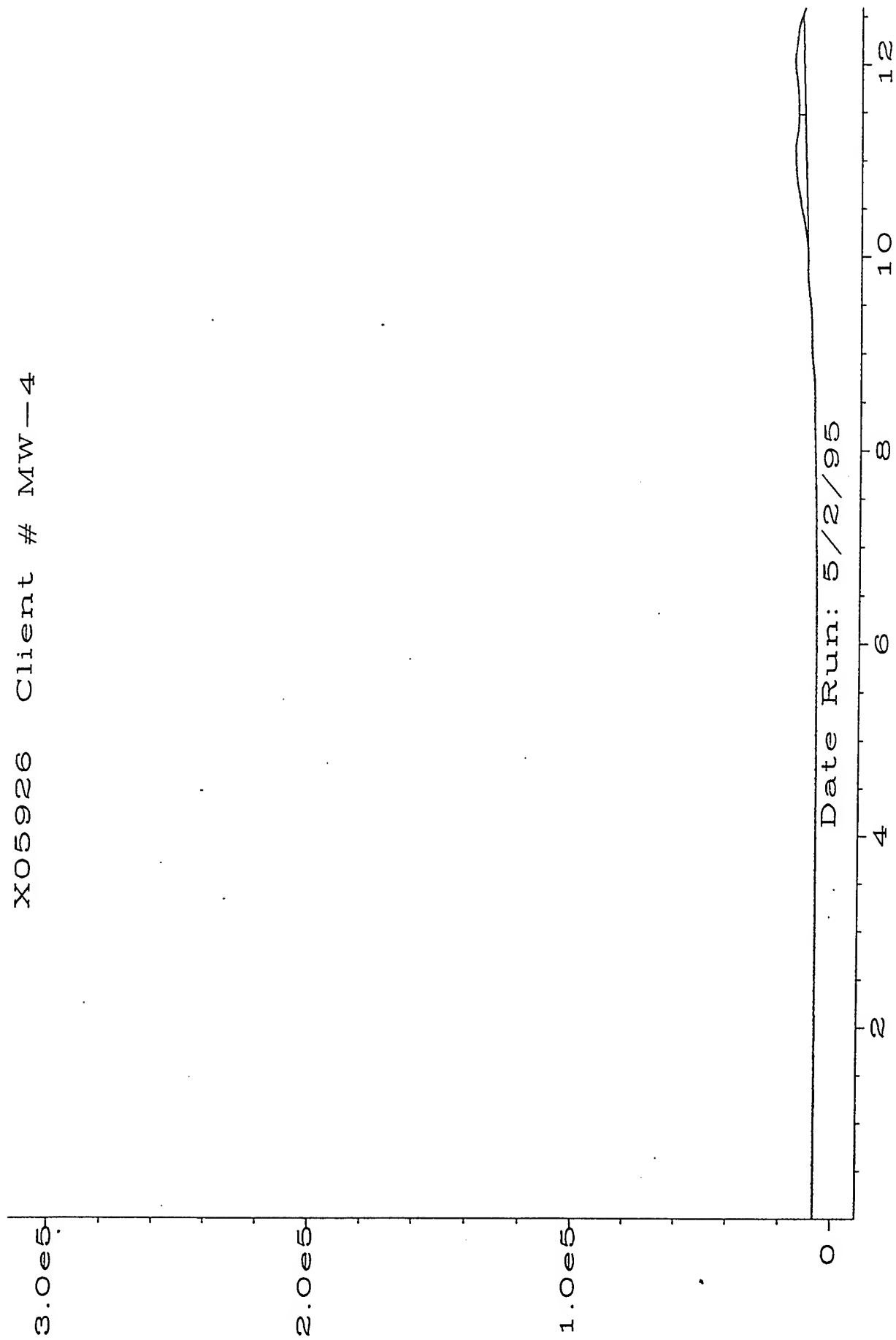
Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\005R0101.D

X05925 Client # CPT-19



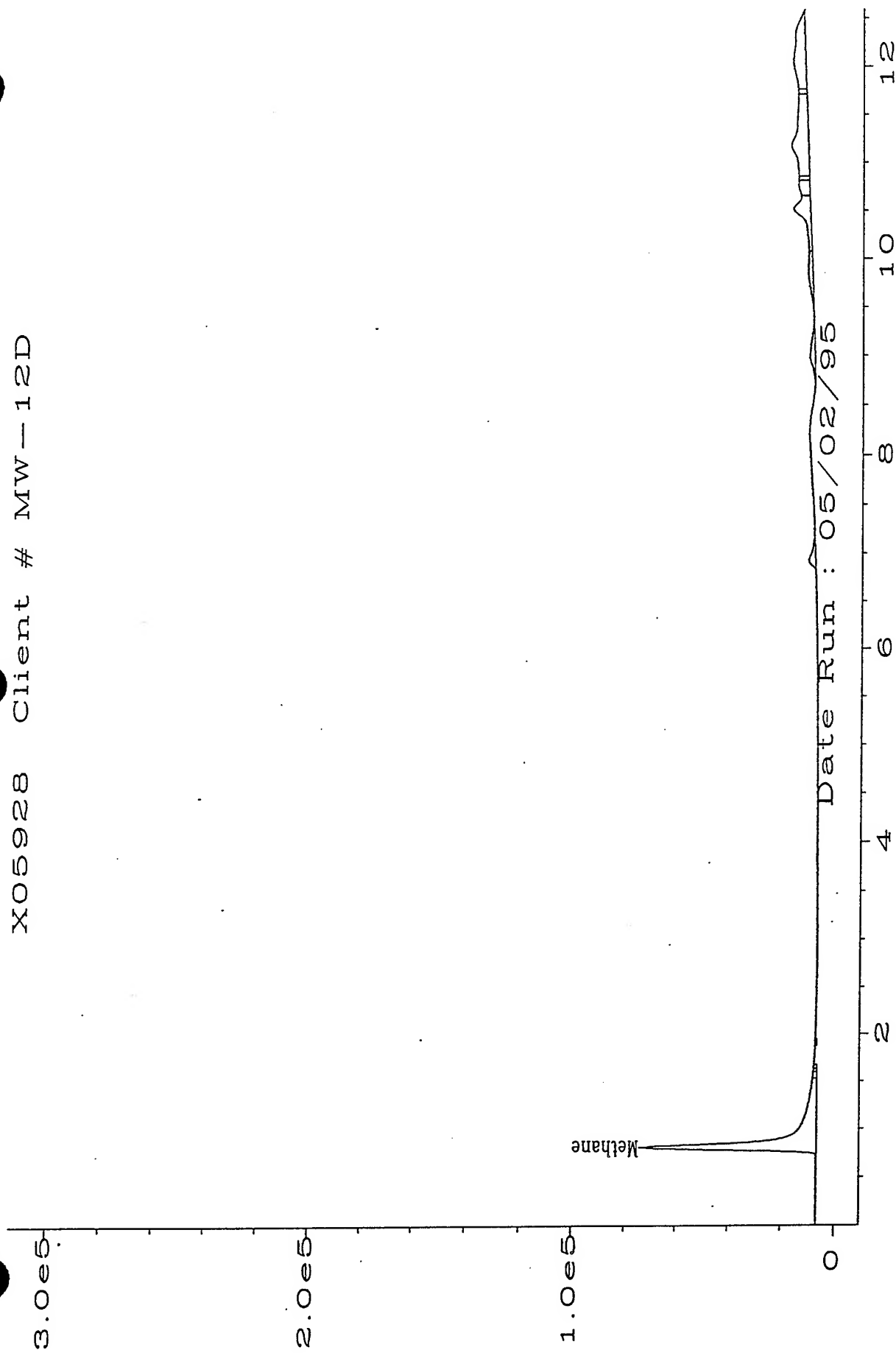
Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\006R0101.D

X05926 Client # MW-4



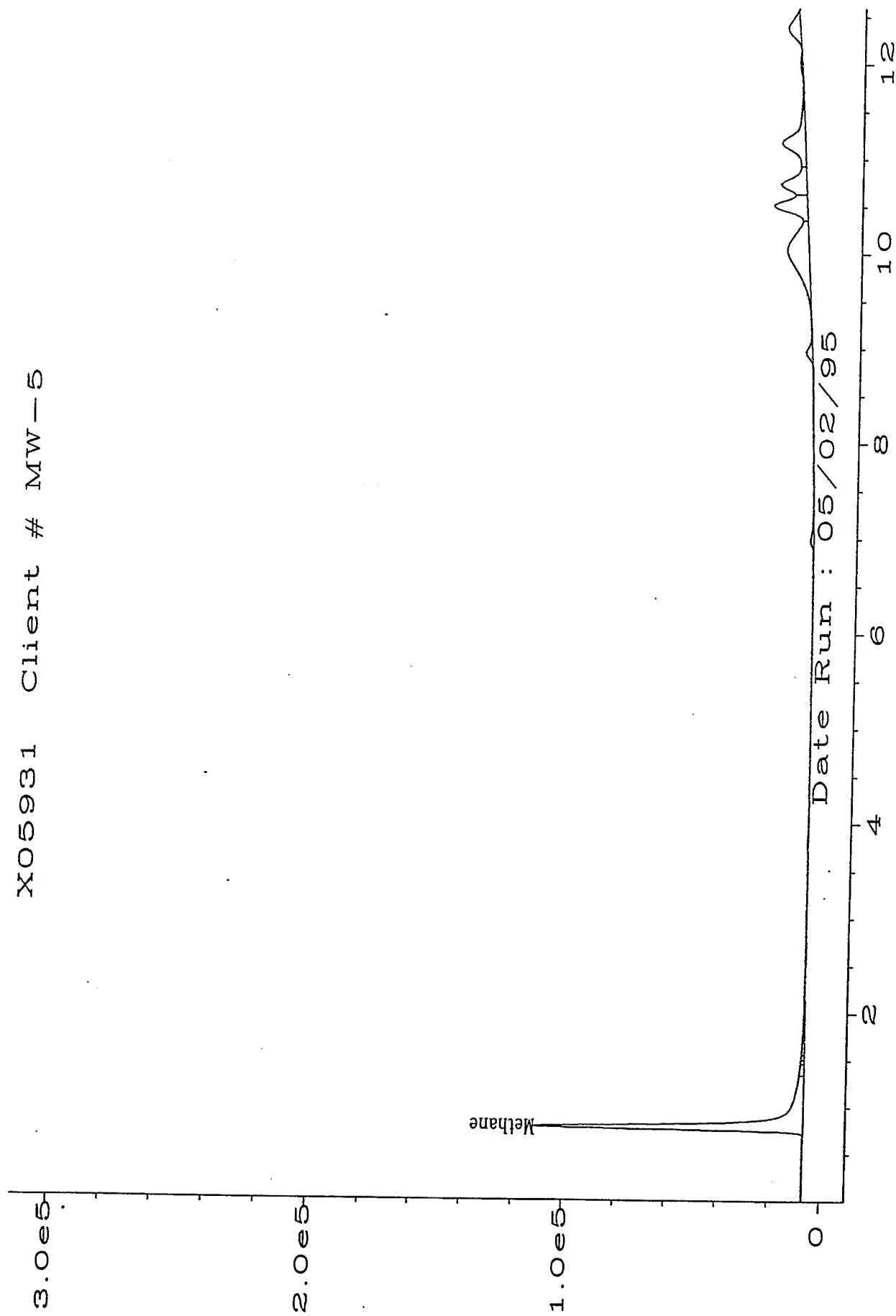
Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\012R0101.D

X05928 Client # MW-12D



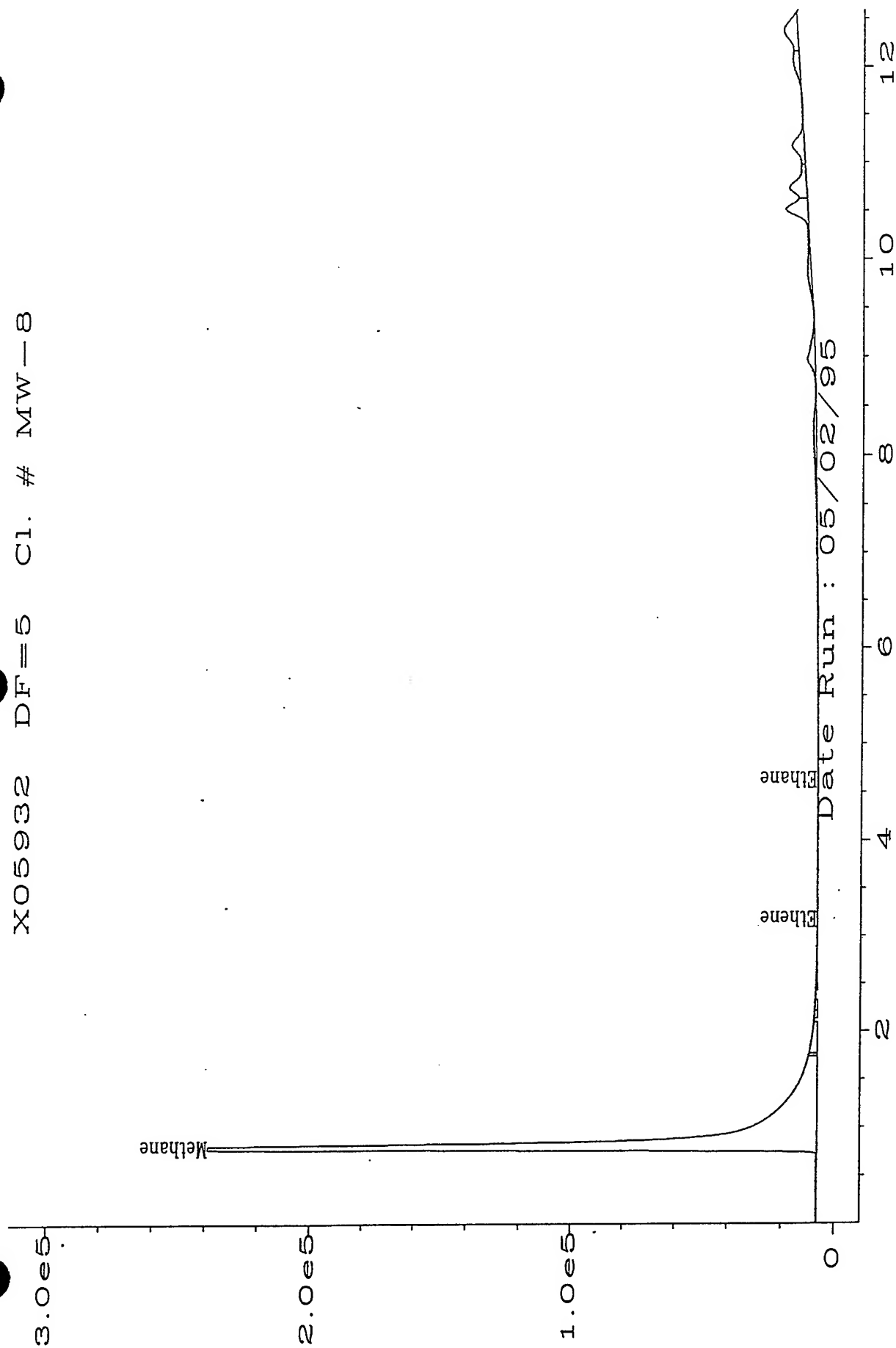
Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\008R0101.D

X05931 Client # MW-5



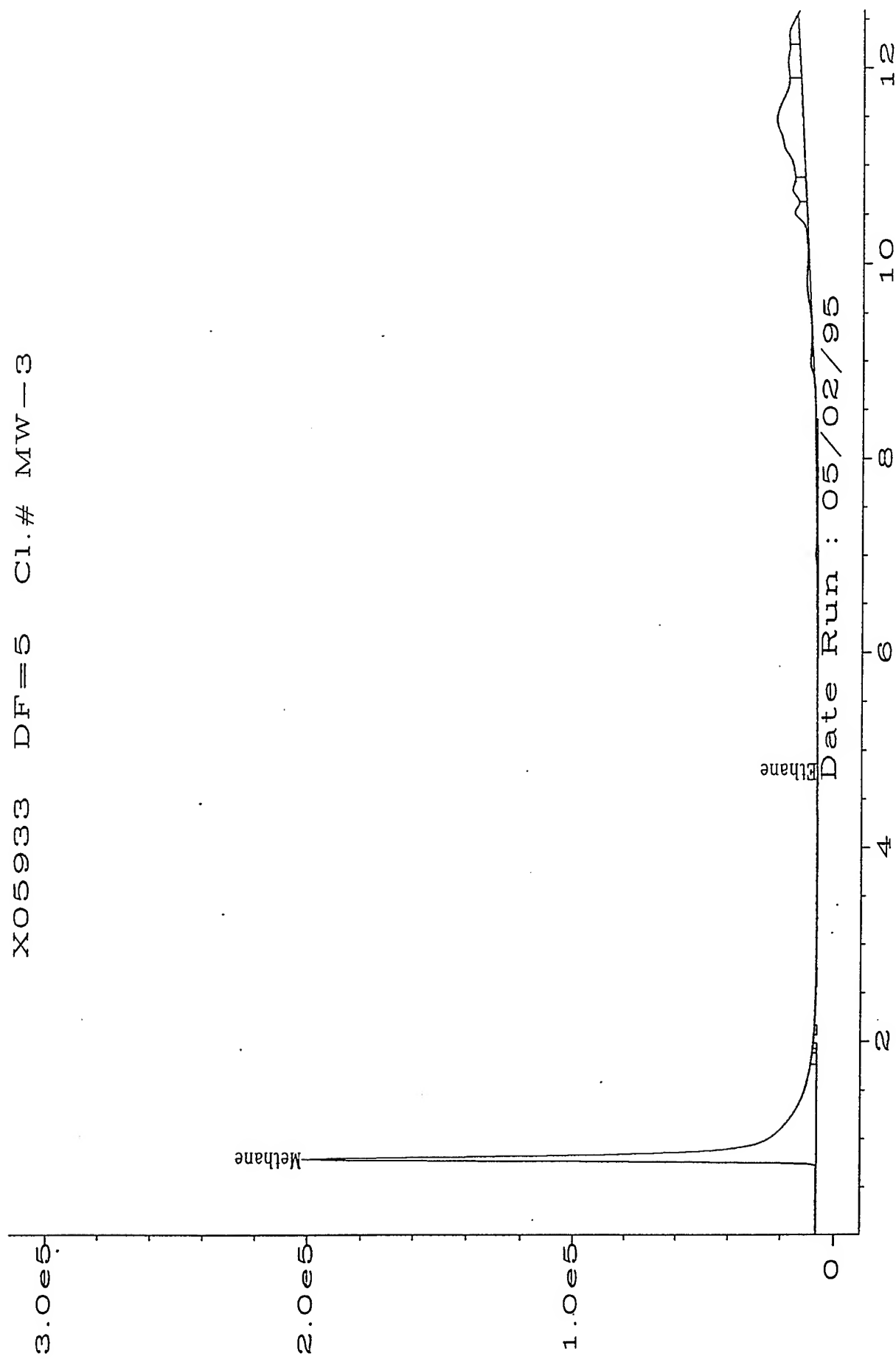
Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\009R0101.D

X05932 DF=5 C1. # MW-8



Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\010R0101.D

X05933 DF=5 Cl.# MW-3



Sig. 2 in C:\HPCHEM\2\DATA\GAS0502\011R0101.D

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Miscellaneous Analyses

Date Sampled : 4/18/95  
Date Received : 4/19/95  
Date Prepared : 4/20/95  
Date Analyzed : 4/20/95

722450.2602/Seymore  
Client Project ID. : Johnson AFB  
Lab Project No. : 95-1264  
Detection Limit : 0.250 mg/L  
Method : EPA 300.0

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Chloride (mg/L)</u> |
|-------------------------------|-----------------------------|---------------|------------------------|
| X05922                        | CPT-17                      | Water         | 14.0                   |
| X05922 Dup                    | CPT-17 Dup                  | Water         | 14.3                   |
| X05923                        | CPT-18                      | Water         | 17.0                   |
| X05925                        | CPT-19                      | Water         | 4.98                   |
| X05926                        | MW-4                        | Water         | 22.1                   |

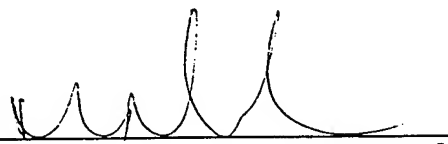
Method Blank 4/20/95

<0.250

Quality Assurance

|  | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|--|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot #J-ION01134 | 20.0                         | 19.1                     | 95.5                  |

Debra V. Byers  
Analyst

  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303)425-6021

Miscellaneous Analyses

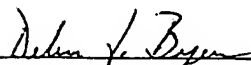
|                         |                                  |
|-------------------------|----------------------------------|
| Date Sampled : 4/18/95  | 722450.2602/Seymore              |
| Date Received : 4/19/95 | Client Project ID. : Johnson AFB |
| Date Prepared : 4/20/95 | Lab Project No. : 95-1264        |
| Date Analyzed : 4/20/95 | Detection Limit : 0.076 mg/L     |
|                         | Method : EPA 300.0               |

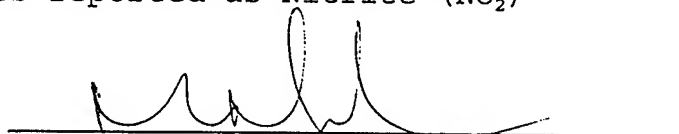
| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Nitrite-N (mg/L)</u> |
|-------------------------------|-----------------------------|---------------|-------------------------|
| X05922                        | CPT-17                      | Water         | <0.076                  |
| X05922 Dup                    | CPT-17 Dup                  | Water         | <0.076                  |
| X05923                        | CPT-18                      | Water         | <0.076                  |
| X05925                        | CPT-19                      | Water         | <0.076                  |
| X05926                        | MW-4                        | Water         | <0.076                  |
| X05928                        | MW-12D                      | Water         | <0.076                  |
| X05931                        | MW-5                        | Water         | <0.076                  |
| X05932                        | MW-8                        | Water         | <0.076                  |
| X05933                        | MW-3                        | Water         | <0.076                  |
| Method Blank 4/20/95          |                             |               | <0.076                  |

Quality Assurance\*\*

|  | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|--|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot #J-IONO1134 | 21.0                         | 20.7                     | 98.6                  |

\*\* = Quality Assurance results reported as Nitrite (NO<sub>2</sub>)

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved

EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

Miscellaneous Analyses

Date Sampled : 4/18/95  
Date Received : 4/19/95  
Date Prepared : 4/20/95  
Date Analyzed : 4/20/95

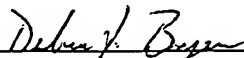
722450.2602/Seymore  
Client Project ID. : Johnson AFB  
Lab Project No. : 95-1264  
Detection Limit : 0.056 mg/L  
Method : EPA 300.0

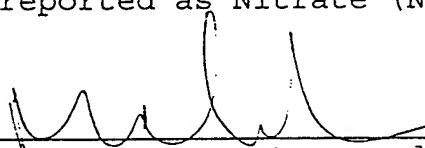
| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Nitrate-N (mg/L)</u> |
|-------------------------------|-----------------------------|---------------|-------------------------|
| X05922                        | CPT-17                      | Water         | <0.056                  |
| X05922 Dup                    | CPT-17 Dup                  | Water         | <0.056                  |
| X05923                        | CPT-18                      | Water         | <0.056                  |
| X05925                        | CPT-19                      | Water         | 0.058                   |
| X05926                        | MW-4                        | Water         | <0.056                  |
| X05928                        | MW-12D                      | Water         | <0.056                  |
| X05931                        | MW-5                        | Water         | <0.056                  |
| X05932                        | MW-8                        | Water         | <0.056                  |
| X05933                        | MW-3                        | Water         | <0.056                  |
| Method Blank 4/20/95          |                             |               | <0.056                  |

Quality Assurance\*\*

|  | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|--|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot #J-ION01134 | 20.0                         | 18.9                     | 94.5                  |

\*\* = Quality Assurance results reported as Nitrate (NO<sub>3</sub>)

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved

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4036 Youngfield St. Wheat Ridge, CO 80033  
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Miscellaneous Analyses

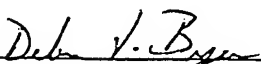
Date Sampled : 4/18/95  
Date Received : 4/19/95  
Date Prepared : 4/20/95  
Date Analyzed : 4/20/95

722450.2602/Seymore  
Client Project ID. : Johnson AFB  
Lab Project No. : 95-1264  
Detection Limit : 0.250 mg/L  
Method : EPA 300.0

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Sulfate (mg/L)</u> |
|-------------------------------|-----------------------------|---------------|-----------------------|
| X05922                        | CPT-17                      | Water         | 2.04                  |
| X05922 Dup                    | CPT-17 Dup                  | Water         | 2.06                  |
| X05923                        | CPT-18                      | Water         | 3.68                  |
| X05925                        | CPT-19                      | Water         | 14.1                  |
| X05926                        | MW-4                        | Water         | 11.6                  |
| X05928                        | MW-12D                      | Water         | 4.00                  |
| X05931                        | MW-5                        | Water         | 11.6                  |
| X05932                        | MW-8                        | Water         | 6.35                  |
| X05933                        | MW-3                        | Water         | 3.95                  |
| Method Blank 4/20/95          |                             |               | <0.250                |

Quality Assurance

|  | <u>True Value<br/>(mg/L)</u> | <u>Result<br/>(mg/L)</u> | <u>%<br/>Recovery</u> |
|--|------------------------------|--------------------------|-----------------------|
| Alltech Anion Mixture-A<br>Lot #J-IONO1134 | 30.0                         | 29.0                     | 96.7                  |

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved

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Miscellaneous Analyses


722450.2602/Seymore  
Date Sampled : 4/18/95 Client Project ID. : Johnson AFB  
Date Received : 4/19/95 Lab Project No. : 95-1264  
Date Prepared : 4/20/95 Detection Limit : 5.00 mgCaCO<sub>3</sub>/L  
Date Analyzed : 4/20/95 Method : EPA 310.1

| <u>Evergreen<br/>Sample #</u> | <u>Client<br/>Sample ID</u> | <u>Matrix</u> | <u>Total Alkalinity<br/>(mgCaCO<sub>3</sub>/L)</u> |
|-------------------------------|-----------------------------|---------------|--|
| X05923                        | CPT-18                      | Water         | 54.1   |
| X05923 Dup                    | CPT-18 Dup                  | Water         | 51.8   |
| X05926                        | MW-4                        | Water         | 68.4   |
| X05928                        | MW-12D                      | Water         | <5.00  |
| X05931                        | MW-5                        | Water         | <5.00  |
| X05932                        | MW-8                        | Water         | <5.00  |
| Method Blank 4/20/95          |                             |               | <5.00  |

Quality Assurance

|                                      | <u>True Value<br/>(mgCaCO<sub>3</sub>/L)</u> | <u>Result<br/>(mgCaCO<sub>3</sub>/L)</u> | <u>%<br/>Recovery</u> |
|--------------------------------------|--|--|-----------------------|
| APG Minerals reference<br>Lot #13862 | 11.8   | 11.5                                     | 97.5                  |

Debra L. Byers  
Analyst

  
Approved

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(303) 425-6021

INORGANIC ANALYSIS DATA SHEET

Date Sampled :4/18/95 Client Project :Seymore Johnson AFB  
Date Received:4/19/95 Lab Project No.:95-1264  
Date Prepared:4/28/95 Method :600/4-79-020, 200.7  
Date Analyzed:5/1/95 Matrix :Water

Units: mg/L

Basis: Total Metal

| Client<br>Sample#    | MW-4    | MW-12D  |                  |                     |
|----------------------|---------|---------|------------------|---------------------|
| Evergreen<br>Sample# | X05926P | X059280 | Reagent<br>Blank | Reporting<br>Limits |
| Pb                   | < 0.055 | < 0.055 | < 0.055          | 0.055               |

| Digested Reference:<br>Inorganic Ventures<br>Lead Lot # J-PB02038 | True<br>Value<br>(mg/L) | Result<br>(mg/L) | %<br>Recovery |
|---|-------------------------|------------------|---------------|
|   | 2.00                    | 1.67             | 83.5          |

M.C.

Analyst

DC

Approved



EVERGREEN ANALYTICAL, INC.  
4036 Youngfield St. Wheat Ridge, CO 80033  
(303) 425-6021

INORGANIC ANALYSIS DATA SHEET  
MATRIX SPIKE DUPLICATE REPORT

|                 |            |                                    |
|-----------------|------------|------------------------------------|
| Client Sample # | :MW-4      | 722450.2602                        |
| Lab Sample #    | :X05926MSD | Client Project:Seymore Johnson AFB |
| Date Sampled    | :4/18/95   | Lab Project # :95-1264             |
| Date Received   | :4/19/95   | Method :600/4-79-020, 200.7        |
| Date Prepared   | :4/28/95   | Matrix :Water                      |
| Date Analyzed   | :5/1/95    | Basis :Total Metal                 |

| Element | Spiked Sample<br>Result<br>(mg/L) | Sample<br>Result<br>(mg/L) | Spiked<br>Amount<br>(mg/L) | Percent<br>Recovery | Relative %<br>Difference |
|---------|-----------------------------------|----------------------------|----------------------------|---------------------|--------------------------|
| Pb      | 0.904                             | < 0.055                    | 1.00                       | 90.4                | 2.8                      |

44.C.

Analyst

DC

Approved

**APPENDIX C**  
**GRIDDED MODEL INPUT AND CALIBRATION RESULTS**  
**FOR BIOPLUME II MODEL**

## Sensitivity Analysis

Along Column 13 (x=13)

| y  | Distance<br>(ft) | Final<br>Calibration<br>Setup16 |       | Dispersivity      |   | Conductivity |      | Anaerobic Decay Coefficient |      | Retardation |       |
|----|------------------|---------------------------------|-------|-------------------|---|--------------|------|-----------------------------|------|-------------|-------|
|    |                  | Dispersivity x.1                |       | Dispersivity x 10 |   | K x 0.1      |      | K x 10                      |      | Co R = 1    |       |
|    |                  | sen-b01                         | z     | sen-b10           | z | sen-k01      | z    | sen-k10                     | z    | sen-a01     | z     |
| 2  | 100              | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 3  | 150              | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 4  | 200              | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 5  | 250              | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 6  | 300              | 11506                           | 0     | 348               | 0 | 35819        | 0    | 772                         | 0    | 0           | 0     |
| 7  | 350              | 4405                            | 12301 | 6116              | 0 | 0            | 864  | 28076                       | 2015 | 15829       | 1355  |
| 8  | 400              | 1342                            | 4526  | 3615              | 0 | 0            | 1186 | 22877                       | 0    | 8988        | 10000 |
| 9  | 450              | 317                             | 1290  | 1424              | 0 | 0            | 625  | 18273                       | 0    | 3798        | 10000 |
| 10 | 500              | 0                               | 45    | 457               | 0 | 0            | 713  | 12553                       | 0    | 2177        | 5000  |
| 11 | 550              | 0                               | 0     | 0                 | 0 | 0            | 746  | 6822                        | 0    | 1060        | 0     |
| 12 | 600              | 0                               | 0     | 0                 | 0 | 0            | 708  | 1670                        | 0    | 521         | 0     |
| 13 | 650              | 0                               | 0     | 0                 | 0 | 0            | 668  | 227                         | 0    | 232         | 0     |
| 14 | 700              | 0                               | 0     | 0                 | 0 | 0            | 605  | 0                           | 0    | 0           | 0     |
| 15 | 750              | 0                               | 0     | 0                 | 0 | 0            | 515  | 0                           | 0    | 0           | 0     |
| 16 | 800              | 0                               | 0     | 0                 | 0 | 0            | 403  | 0                           | 0    | 0           | 0     |
| 17 | 850              | 0                               | 0     | 0                 | 0 | 0            | 270  | 0                           | 0    | 0           | 0     |
| 18 | 900              | 0                               | 0     | 0                 | 0 | 0            | 147  | 0                           | 0    | 0           | 0     |
| 19 | 950              | 0                               | 0     | 0                 | 0 | 0            | 57   | 0                           | 0    | 0           | 0     |
| 20 | 1000             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 21 | 1050             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 22 | 1100             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 23 | 1150             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 24 | 1200             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 25 | 1250             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 26 | 1300             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 27 | 1350             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 28 | 1400             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |
| 29 | 1450             | 0                               | 0     | 0                 | 0 | 0            | 0    | 0                           | 0    | 0           | 0     |

Gridded BTEX Plume

R = 19.3

**Seymour Johnson AFB**  
**Groundwater Model Calibration Error**  
**Setup-2**

| Location | Average<br>Water Level | Calibrated<br>Water Level | Deviation from Mean |                         |                 |
|----------|------------------------|---------------------------|---------------------|-------------------------|-----------------|
|          |                        |                           | $h_m - h_s$         | $\text{abs}(h_m - h_s)$ | $(h_m - h_s)^2$ |
| MW-3     | 87.20                  | 86.13                     | -1.07               | 1.07                    | 1.15            |
| MW-4     | 86.54                  | 85.91                     | -0.62               | 0.62                    | 0.39            |
| MW-5     | 86.14                  | 85.70                     | -0.45               | 0.45                    | 0.20            |
| MW-6     | 85.77                  | 85.48                     | -0.29               | 0.29                    | 0.09            |
| MW-7     | 86.00                  | 85.91                     | -0.09               | 0.09                    | 0.01            |
| MW-8     | 87.04                  | 86.35                     | -0.69               | 0.69                    | 0.48            |
| MW-11    | 86.42                  | 85.91                     | -0.51               | 0.51                    | 0.26            |
| MW-14    | 86.70                  | 85.70                     | -1.00               | 1.00                    | 1.01            |
| MW-15    | 86.08                  | 85.48                     | -0.60               | 0.60                    | 0.36            |
| MW-16    | 85.43                  | 85.26                     | -0.17               | 0.17                    | 0.03            |
| MW-17    | 85.37                  | 85.26                     | -0.11               | 0.11                    | 0.01            |
| MW-18    | 86.45                  | 86.56                     | 0.11                | 0.11                    | 0.01            |
| MW-19    | 87.05                  | 87.00                     | -0.05               | 0.05                    | 0.00            |
| CPT-16   | 86.18                  | 85.69                     | -0.49               | 0.49                    | 0.24            |
| CPT-17   | 86.74                  | 85.91                     | -0.83               | 0.83                    | 0.68            |
| CPT-18   | 86.58                  | 86.13                     | -0.45               | 0.45                    | 0.20            |
| Totals:  |                        |                           | -7.32               | 7.5                     | 5.1             |
|          |                        |                           | n=                  | 16                      |                 |
|          |                        |                           | ME=                 | -0.457                  |                 |
|          |                        |                           | MAE=                | 0.47                    |                 |
|          |                        |                           | RMS=                | 0.57                    |                 |

$h_m$  = Calibrated Water Level

$h_s$  = Actual Water Level

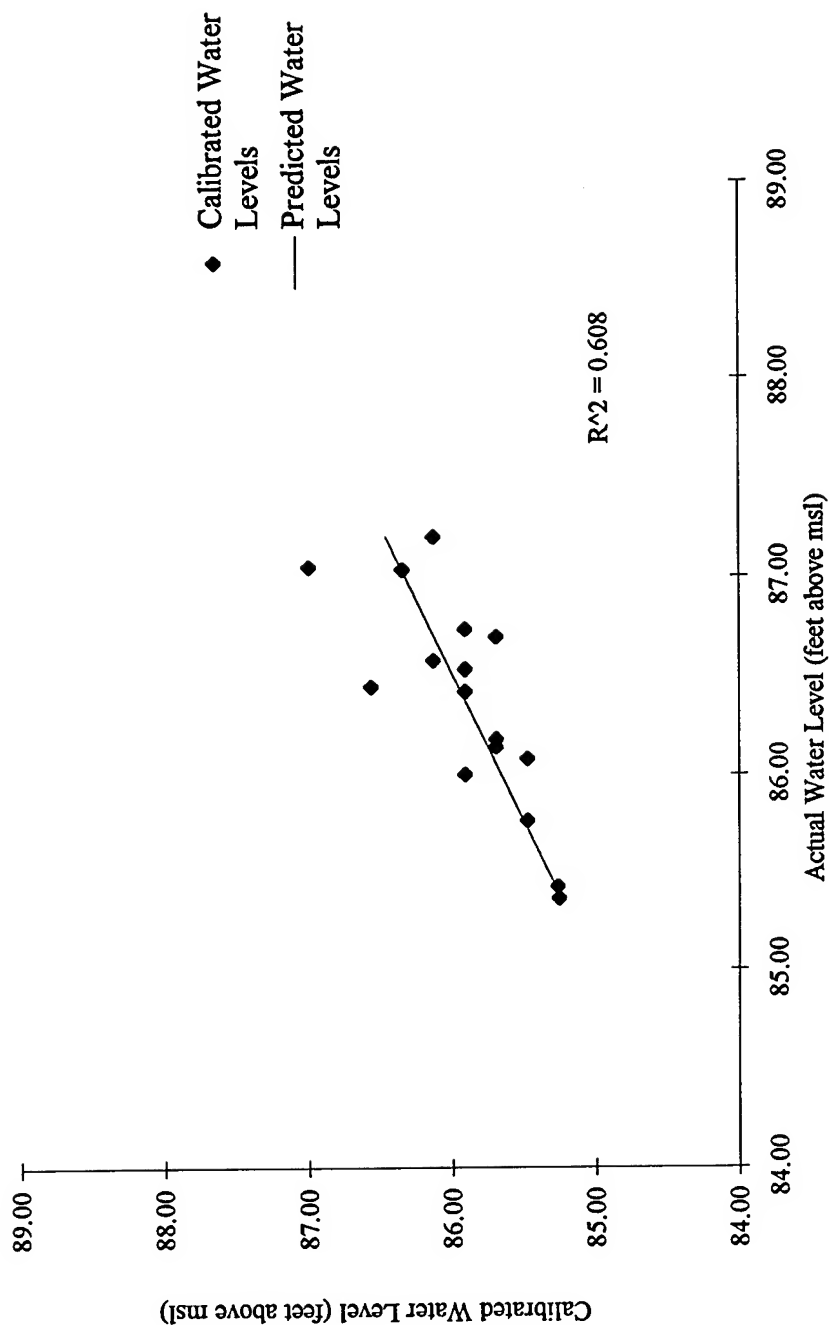
$n$  = Number of Observations

$ME = 1/n * \sum (h_m - h_s)$

$MAE = 1/n * \sum |h_m - h_s|$

$RMS = (1/n * \sum (h_m - h_s)^2)^{0.5}$

# Groundwater Model Water Table Calibration



## SUMMARY OUTPUT

| Regression Statistics |             |
|-----------------------|-------------|
| Multiple R            | 0.780323519 |
| R Square              | 0.608904794 |
| Adjusted R Square     | 0.580969422 |
| Standard Error        | 0.301888784 |
| Observations          | 16          |

| ANOVA      |    |             |             |             |                |
|------------|----|-------------|-------------|-------------|----------------|
|            | df | SS          | MS          | F           | Significance F |
| Regression | 1  | 1.986501483 | 1.986501483 | 21.79691029 | 0.000362007    |
| Residual   | 14 | 1.275915733 | 0.091136838 |             |                |
| Total      | 15 | 3.262417216 |             |             |                |

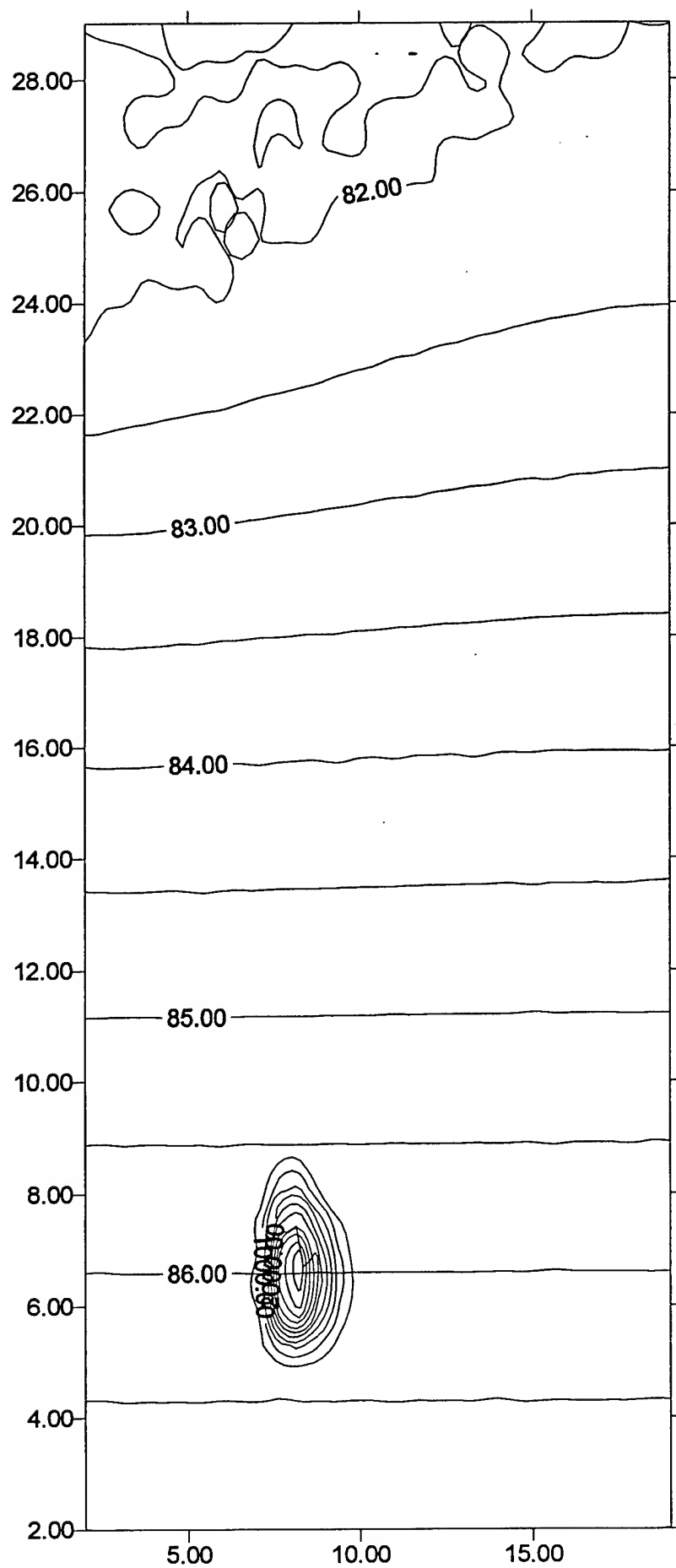
|              | Coefficients | Standard Error | t Stat      | P-value     | Lower 95%   | Upper 95%   | Lower 95.0% | Upper 95.0% |
|--------------|--------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Intercept    | 28.3606218   | 12.32438089    | 2.301180242 | 0.037266777 | 1.927430217 | 54.79381338 | 1.927430217 | 54.79381338 |
| X Variable 1 | 0.666287568  | 0.142713232    | 4.668716129 | 0.000362007 | 0.360197855 | 0.97237728  | 0.360197855 | 0.97237728  |

## RESIDUAL OUTPUT

| Observation | Predicted Y | Residuals    | Standard Residuals |
|-------------|-------------|--------------|--------------------|
| 1           | 86.46311865 | -0.333218654 | -1.103779508       |
| 2           | 86.01892694 | -0.106736942 | -0.353563787       |
| 3           | 85.75685383 | -0.061543832 | -0.203862598       |
| 4           | 85.50810647 | -0.031226473 | -0.103437011       |
| 5           | 85.66357357 | 0.247786427  | 0.820787126        |
| 6           | 86.35207073 | -0.005050726 | -0.016730418       |
| 7           | 85.94341435 | -0.031674351 | -0.104920595       |
| 8           | 86.12775391 | -0.431013911 | -1.427724161       |
| 9           | 85.71465562 | -0.235705619 | -0.780769713       |
| 10          | 85.2815687  | -0.0209087   | -0.069259613       |
| 11          | 85.24159145 | 0.013988554  | 0.046336778        |
| 12          | 85.96118202 | 0.602947981  | 1.997252008        |
| 13          | 86.36095456 | 0.63904544   | 2.116824054        |
| 14          | 85.78128438 | -0.086434376 | -0.286311982       |
| 15          | 86.15440541 | -0.241525414 | -0.800047655       |
| 16          | 86.0477994  | 0.081270597  | 0.269207076        |

Seymour Johnson AFB  
Head Comparison  
Setup-2

| Well   | Cell (X,Y) | Groundwater           | Groundwater         | Groundwater          | Average<br>Elevation | Model<br>Elevation |
|--------|------------|-----------------------|---------------------|----------------------|----------------------|--------------------|
|        |            | Elevation<br>April,26 | Elevation<br>May,18 | Elevation<br>July,19 |                      |                    |
| MW-2   | (13,7)     | 87.04                 | 87.78               | 87.5                 | 87.44                | 85.91219           |
| MW-3   | (14,6)     | 87.09                 | 86.92               | 87.6                 | 87.20333333          | 86.1299            |
| MW-4   | (13,7)     | 86.51                 | 86.21               | 86.89                | 86.53666667          | 85.91219           |
| MW-5   | (14,8)     | 86.13                 | 85.86               | 86.44                | 86.14333333          | 85.69531           |
| MW-6   | (12,9)     | 85.82                 | 85.55               | 85.94                | 85.77                | 85.47688           |
| MW-7   | (11,7)     | 86                    | 85.73               | 86.28                | 86.00333333          | 85.91136           |
| MW-8   | (12,5)     | 86.89                 | 86.82               | 87.4                 | 87.03666667          | 86.34702           |
| MW-11  | (12,7)     | 86.39                 | 86.14               | 86.74                | 86.42333333          | 85.91174           |
| MW-14  | (18,8)     |                       |                     | 86.7                 | 86.7                 | 85.69674           |
| MW-15  | (15,9)     |                       |                     | 86.08                | 86.08                | 85.47895           |
| MW-16  | (13,10)    |                       |                     | 85.43                | 85.43                | 85.26066           |
| MW-17  | (8,10)     |                       |                     | 85.37                | 85.37                | 85.25558           |
| MW-18  | (8,4)      |                       |                     | 86.45                | 86.45                | 86.56413           |
| MW-19  | (10,2)     |                       |                     | 87.05                | 87.05                | 87                 |
| CPT-16 | (13,8)     | 86.18                 | 85.9                | 86.46                | 86.18                | 85.69485           |
| CPT-17 | (15,7)     | 86.64                 | 86.47               | 87.11                | 86.74                | 85.91288           |
| CPT-18 | (11,6)     | 86.72                 | 86.56               | 86.46                | 86.58                | 86.12907           |
| CPT-19 | (14,5)     | 85.08                 | 85.01               | 84.97                | 85.02                | 86.3474            |



Seymour Johnson AFB Setup-2, Initial Steady-state Conditions

## ESTIMATION OF LONGITUDINAL DISPERSIVITY

Assumptions: A. Plume migration is sufficiently aligned along the longitudinal axis of the grid to calculate a longitudinal moment.

B. Longitudinal dispersivity is 1/10 of the distance from the contaminant source to the center of contamination.

From Appendix D2, an estimate for the center of mass along the plume center line will be taken by calculating the longitudinal moment around MW-13, which is near the source of contamination.

| Mass<br>(ug/l) | Distance From<br>MW-13<br>(ft) | Mass x Distance<br>(ug-ft/L) |
|----------------|--------------------------------|------------------------------|
| 13,800         | 67                             | 924,600                      |
| 10,000         | 90                             | 900,000                      |
| 8,860          | 93                             | 823,980                      |
| 1,000          | 108                            | 108,000                      |
| 26             | 135                            | 3,510                        |
| 10             | 190                            | 1,900                        |
| Totals: 33,696 |                                | 2,761,990                    |

Now, estimate the longitudinal centroid of the plume:

$\Sigma(\text{mass} \times \text{distance}) / \Sigma(\text{mass})$  in feet: 81.97  
 Estimated distance from cell (10,3) to the centroid in feet: 81.97  
 Estimated Longitudinal Dispersivity (Dist. x 0.1) in feet: 8.20

**APPENDIX D**

**BIOPLUME II MODEL OUTPUT**

**APPENDIX E**

**ANALYTICAL MODELS**

## APPENDIX E

### ANALYTICAL MODELS

One-dimensional analytical models based on the works of Bear (1979) and vanGenuchten and Alves (1982) were used during the modeling effort. The models incorporate advection, dispersion, retardation, and first-order decay in order to simulate one-dimensional contaminant fate and transport. Analytical models were first used to screen potential value ranges for select parameters prior to incorporation into the Bioplume II model. Afterwards, analytical model results were used for comparison to calibrated and predictive Bioplume II models to help confirm the results of the numerical models. Analytical model results are presented in Appendix F.

To verify the results of model SETUP16, Parsons ES compared numerical results obtained from Bioplume II to results obtained from a steady-state one-dimensional analytical model (Bear, 1979), which incorporates one-dimensional advection, dispersion, retardation, and first-order decay. Using hydrogeologic parameters and contaminant decay kinetics as calibrated in the numerical model, the analytical model predicted dissipation of the BTEX plume within 400 feet of the source area.

Source decay combined with the contaminant decay kinetics and hydrogeologic parameters used to calibrate the numerical model was used in a one-dimensional analytical model to verify the Bioplume II model results for model SR5. Assuming a 95-percent reduction of BTEX concentration at the source over the 5-year source removal time frame, the first-order decay coefficient for the BTEX source is  $0.000028 \text{ day}^{-1}$ . The selected analytical model (vanGenuchten and Alves, 1982) incorporates advection, dispersion, retardation, and first-order decay of both the source and the solute concentrations. Results from this analytical model, were compared to BTEX concentrations observed from the 1995 data and the numerical model results from Bioplume II. This model predicted that the creek would never be impacted. Using a BTEX decay rate of  $0.00359 \text{ day}^{-1}$  (which is approximately equal to the calibrated decay rate in the Bioplume II numerical models), the maximum predicted BTEX concentration at the creek was  $2 \times 10^{-7} \mu\text{g/L}$ .

Bioplume II results for model SR3 were compared to results from the analytical model described above using a BTEX source decay rate of  $0.0000468 \text{ day}^{-1}$ . This rate assumes a 95-percent reduction of BTEX concentration at the source over the 3-year source removal time frame. The one-dimensional analytical model results using this source decay coefficient were nearly identical to those compared to model SR5; however, as would be expected, the model with the more rapid source decay rate also predicts BTEX concentrations decaying toward zero more rapidly.

**First-Order Rate Constant Calculation**  
**Calculated Along the Primary Southeastern Groundwater Flow Path**  
**Using 0.005 ft/ft Gradient**  
**Former AGE Fueling Facility Site Intrinsic Remediation EE/CA**  
**Seymour Johnson AFB, North Carolina**

| Compound  | Monitoring Point Location                    |  |   |   |   |   |   |   |
|---|--|--|---|---|---|---|---|---|
|   | MW-13<br>Measured<br>Concentration<br>(µg/L) | MW-13<br>Equilibrium<br>Concentration <sup>v</sup><br>(µg/L) | MW-4<br>Measured<br>Concentration<br>(µg/L) | MW-4<br>Corrected<br>Concentration <sup>b</sup><br>(µg/L) | First Order<br>Rate Constant<br>Between B and C <sup>c</sup><br>(week <sup>-1</sup> ) | CPT-16<br>Measured<br>Concentration<br>(µg/L) | CPT-16<br>Corrected<br>Concentration <sup>b</sup><br>(µg/L) | First Order<br>Rate Constant<br>Between C and D <sup>c</sup><br>(week <sup>-1</sup> ) |
| benzene   | 1000000                                      | 9280   | 2300  | 1361  | 0.0251  | 2100  | 3216  | -0.0089   |
| toluene   | 3500000                                      | 8490   | 3300  | 1953  | 0.0192  | 2100  | 3216  | 0.0007  |
| ethylbenzene  | 2300000                                      | 670  | 1100  | 651   | 0.0004  | 560   | 858   | 0.0066  |
| Total xylenes   | 7300000                                      | 1171   | 7100  | 4202  | -0.0167   | 4100  | 6278  | 0.0033  |
| Total BTEX  | 14100000                                     | 19611  | 13800                                       | 8167  | 0.0114  | 8860  | 13568   | 0.0004  |
| trimethylbenzene  | 10000000                                     | 870  | 1470  | 870   |   | 960   | 1470  |   |
| <sup>a/</sup> Corrected for LNAPL in sample by methods in Wiedemeier et al. (1995). |  |  |   |   |   |   |   |   |
| <sup>b/</sup> See text for calculation of corrected concentration.                  |  |  |   |   |   |   |   |   |
| <sup>c/</sup> See text for calculation of first order rate constant.                |  |  |   |   |   |   |   |   |
|   |  |  |   |   |   |   | Overall Maximum   | 0.0251  |
|   |  |  |   |   |   |   | Overall Minimum   | -0.0167   |
|   |  |  |   |   |   |   | Overall Average   | 0.0041  |

**RATE CONSTANT CALCULATIONS  
FORMER AGE FUELING FACILITY SITE  
INTRINSIC REMEDIATION EE/CA  
SEYMOUR JOHNSON AFB, NORTH CAROLINA**

| Compound                   | Y Intercept (b) <sup>a/</sup> | Slope <sup>a/</sup> | R <sup>2</sup> <sup>a/</sup> | First-order Rate Constant <sup>a/</sup><br>(day <sup>-1</sup> ) |
|----------------------------|-------------------------------|---------------------|------------------------------|---|
| Benzene <sup>b/</sup>      | 877520                        | -0.0327             | 0.96                         | 0.0016  |
| Toluene <sup>b/</sup>      | 5501224                       | -0.0459             | 0.95                         | 0.0019  |
| Ethylbenzene <sup>b/</sup> | 3004431                       | -0.0478             | 0.96                         | 0.0019  |
| Xylene <sup>b/</sup>       | 16509596                      | -0.0505             | 0.92                         | 0.0019  |
| Total BTEX <sup>b/</sup>   | 14896685                      | -0.0406             | 0.97                         | 0.0018  |
| Overall Maximum:           |                               |                     |                              | 0.0019  |
| Overall Minimum:           |                               |                     |                              | 0.0016  |
| Overall Average:           |                               |                     |                              | 0.0018  |

<sup>a/</sup> Calculated by linear regression of site data using Buscheck and Alcantar (1995) method.

<sup>b/</sup> Calculated by using data from MW-4, MW-6, MW-13, and CPT-16

**DATA USED FOR FIRST-ORDER RATE CONSTANT CALCULATIONS**  
**FORMER AGE FUELING FACILITY SITE**  
**INTRINSIC REMEDIATION EE/CA**  
**SEYMOUR JOHNSON AFB, NORTH CAROLINA**

| Sample Location | Distance Downgradient | Travel Time from Location MW-13 | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Xylenes (µg/L) | Total BTEX (µg/L) |
|-----------------|-----------------------|---------------------------------|----------------|----------------|---------------------|----------------|-------------------|
| MW-13           | 0                     | 0                               | 1000000        | 3500000        | 2300000             | 7300000        | 14100000          |
| MW-4            | 67                    | 536                             | 2300           | 3300           | 1100                | 7100           | 13800             |
| CPT-16          | 94                    | 752                             | 2100           | 2100           | 560                 | 4100           | 8860              |
| MW-6            | 135                   | 1080                            | 25             | 1              | 0.4                 | 0.4            | 26.8              |

**FUEL HYDROCARBON COMPOUNDS DETECTED IN GROUNDWATER  
FORMER AGE FUELING FACILITY SITE  
INTRINSIC REMEDIATION EE/CA  
SEYMOUR JOHNSON AFB, NORTH CAROLINA**

| Sample Location | Distance Downgradient | Travel Time from Location MW-13 | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Xylenes (µg/L) | Total BTEX (µg/L) |
|-----------------|-----------------------|---------------------------------|----------------|----------------|---------------------|----------------|-------------------|
| MW-13           | 0                     | 0                               | 6.00           | 6.544          | 6.36                | 6.86           | 7.15              |
| MW-4            | 67                    | 536                             | 3.36           | 3.519          | 3.04                | 3.85           | 4.14              |
| CPT-16          | 94                    | 752                             | 3.32           | 3.322          | 2.75                | 3.61           | 3.95              |
| MW-6            | 135                   | 1080                            | 1.40           | 0.000          | -0.40               | -0.40          | 1.43              |

velocity (ft/day)= 0.125

benzene

|     |      |
|-----|------|
| 0   | 6.00 |
| 67  | 3.36 |
| 94  | 3.32 |
| 135 | 1.40 |

toluene

|     |             |
|-----|-------------|
| 0   | 6.544068044 |
| 67  | 3.51851394  |
| 94  | 3.322219295 |
| 135 | 0           |

ethylbenzene

|     |             |
|-----|-------------|
| 0   | 6.361727836 |
| 67  | 3.041392685 |
| 94  | 2.748188027 |
| 135 | -0.39794001 |

xylenes

|     |             |
|-----|-------------|
| 0   | 6.86332286  |
| 67  | 3.851258349 |
| 94  | 3.612783857 |
| 135 | -0.39794001 |

BTEX

|     |      |
|-----|------|
| 0   | 7.15 |
| 67  | 4.14 |
| 94  | 3.95 |
| 135 | 1.43 |

## SUMMARY OUTPUT

| <i>Regression Statistics</i> |          |
|------------------------------|----------|
| Multiple R                   | 0.984149 |
| R Square                     | 0.96855  |
| Adjusted                     | 0.952825 |
| Standard                     | 0.508507 |
| Observati                    | 4        |

## ANOVA

|           | <i>df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | <i>gnificance F</i> |
|-----------|-----------|-----------|-----------|----------|---------------------|
| Regressio | 1         | 15.9268   | 15.9268   | 61.59337 | 0.015851            |
| Residual  | 2         | 0.517159  | 0.25858   |          |                     |
| Total     | 3         | 16.44396  |           |          |                     |

|           | <i>Coefficient</i> | <i>ndard Err</i> | <i>t Stat</i> | <i>P-value</i> | <i>ower 95</i> | <i>pper 95</i> | <i>ower 95.0</i> | <i>pper 95.0</i> |
|-----------|--------------------|------------------|---------------|----------------|----------------|----------------|------------------|------------------|
| Intercept | 7.17309            | 0.459826         | 15.59958      | 0.004084       | 5.194618       | 9.151562       | 5.194618         | 9.151562         |
| X Variabl | -0.04063           | 0.005178         | -7.84814      | 0.015851       | -0.06291       | -0.01836       | -0.06291         | -0.01836         |

## RESIDUAL OUTPUT

| <i>bservatio</i> | <i>redicted</i> | <i>Residuals</i> |
|------------------|-----------------|------------------|
| 1                | 7.17309         | -0.02387         |
| 2                | 4.450605        | -0.31073         |
| 3                | 3.353485        | 0.593949         |
| 4                | 1.687487        | -0.25935         |

## SUMMARY OUTPUT

| <i>Regression Statistics</i> |          |
|------------------------------|----------|
| Multiple R                   | 0.982214 |
| R Square                     | 0.964744 |
| Adjusted                     | 0.947116 |
| Standard                     | 0.434664 |
| Observati                    | 4        |

## ANOVA

|           | <i>df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | <i>gnificance F</i> |
|-----------|-----------|-----------|-----------|----------|---------------------|
| Regressio | 1         | 10.33984  | 10.33984  | 54.72749 | 0.017786            |
| Residual  | 2         | 0.377866  | 0.188933  |          |                     |
| Total     | 3         | 10.71771  |           |          |                     |

|           | <i>Coefficient</i> | <i>ndard Err</i> | <i>t Stat</i> | <i>P-value</i> | <i>ower 95</i> | <i>pper 95</i> | <i>ower 95.0</i> | <i>pper 95.0</i> |
|-----------|--------------------|------------------|---------------|----------------|----------------|----------------|------------------|------------------|
| Intercept | 5.943257           | 0.393052         | 15.12079      | 0.004345       | 4.252089       | 7.634425       | 4.252089         | 7.634425         |
| X Variabl | -0.03274           | 0.004426         | -7.3978       | 0.017786       | -0.05178       | -0.0137        | -0.05178         | -0.0137          |

## RESIDUAL OUTPUT

| <i>bservatio</i> | <i>redicted</i> | <i>Residuals</i> |
|------------------|-----------------|------------------|
| 1                | 5.943257        | 0.056743         |
| 2                | 3.749654        | -0.38793         |
| 3                | 2.865665        | 0.456554         |
| 4                | 1.523311        | -0.12537         |

## SUMMARY OUTPUT

| <u>Regression Statistics</u> |          |
|------------------------------|----------|
| Multiple R                   | 0.972604 |
| R Square                     | 0.945958 |
| Adjusted                     | 0.918937 |
| Standard                     | 0.761379 |
| Observati                    | 4        |

## ANOVA

|           | <i>df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | <i>gnificance F</i> |
|-----------|-----------|-----------|-----------|----------|---------------------|
| Regressio | 1         | 20.29429  | 20.29429  | 35.00838 | 0.027396            |
| Residual  | 2         | 1.159396  | 0.579698  |          |                     |
| Total     | 3         | 21.45368  |           |          |                     |

|           | <i>Coefficient</i> | <i>ndard Err</i> | <i>t Stat</i> | <i>P-value</i> | <i>ower 95</i> | <i>pper 95</i> | <i>ower 95.0</i> | <i>pper 95.0</i> |
|-----------|--------------------|------------------|---------------|----------------|----------------|----------------|------------------|------------------|
| Intercept | 6.740459           | 0.688489         | 9.790223      | 0.010273       | 3.778129       | 9.70279        | 3.778129         | 9.70279          |
| X Variabl | -0.04587           | 0.007752         | -5.91679      | 0.027396       | -0.07922       | -0.01251       | -0.07922         | -0.01251         |

## RESIDUAL OUTPUT

| <i>bservatio</i> | <i>redicted</i> | <i>Residuals</i> |
|------------------|-----------------|------------------|
| 1                | 6.740459        | -0.19639         |
| 2                | 3.667279        | -0.14876         |
| 3                | 2.428833        | 0.893386         |
| 4                | 0.54823         | -0.54823         |

## SUMMARY OUTPUT

| <i>Regression Statistics</i> |          |
|------------------------------|----------|
| Multiple R                   | 0.981711 |
| R Square                     | 0.963756 |
| Adjusted                     | 0.945634 |
| Standard                     | 0.64416  |
| Observati                    | 4        |

## ANOVA

|           | <i>df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | <i>gnificance F</i> |
|-----------|-----------|-----------|-----------|----------|---------------------|
| Regressio | 1         | 22.06724  | 22.06724  | 53.18142 | 0.018289            |
| Residual  | 2         | 0.829885  | 0.414943  |          |                     |
| Total     | 3         | 22.89713  |           |          |                     |

|           | <i>Coefficient</i> | <i>ndard Err</i> | <i>t Stat</i> | <i>P-value</i> | <i>ower 95</i> | <i>pper 95</i> | <i>ower 95.0</i> | <i>pper 95.0</i> |
|-----------|--------------------|------------------|---------------|----------------|----------------|----------------|------------------|------------------|
| Intercept | 6.477762           | 0.582492         | 11.12077      | 0.007989       | 3.971499       | 8.984026       | 3.971499         | 8.984026         |
| X Variabl | -0.04783           | 0.006559         | -7.29256      | 0.018289       | -0.07605       | -0.01961       | -0.07605         | -0.01961         |

## RESIDUAL OUTPUT

| <i>bservatio</i> | <i>redicted</i> | <i>Residuals</i> |
|------------------|-----------------|------------------|
| 1                | 6.477762        | -0.11603         |
| 2                | 3.273152        | -0.23176         |
| 3                | 1.981742        | 0.766446         |
| 4                | 0.020712        | -0.41865         |

## SUMMARY OUTPUT

| <i>Regression Statistics</i> |          |
|------------------------------|----------|
| Multiple R                   | 0.960418 |
| R Square                     | 0.922403 |
| Adjusted                     | 0.883605 |
| Standard                     | 1.016671 |
| Observati                    | 4        |

## ANOVA

|           | <i>df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | <i>gnificance F</i> |
|-----------|-----------|-----------|-----------|----------|---------------------|
| Regressio | 1         | 24.5735   | 24.5735   | 23.77422 | 0.039582            |
| Residual  | 2         | 2.067239  | 1.03362   |          |                     |
| Total     | 3         | 26.64073  |           |          |                     |

|           | <i>Coefficient</i> | <i>ndard Err</i> | <i>t Stat</i> | <i>P-value</i> | <i>ower 95</i> | <i>pper 95</i> | <i>ower 95.0</i> | <i>pper 95.0</i> |
|-----------|--------------------|------------------|---------------|----------------|----------------|----------------|------------------|------------------|
| Intercept | 7.217364           | 0.919341         | 7.850588      | 0.015841       | 3.261758       | 11.17297       | 3.261758         | 11.17297         |
| X Variabl | -0.05047           | 0.010352         | -4.87588      | 0.039582       | -0.09501       | -0.00593       | -0.09501         | -0.00593         |

## RESIDUAL OUTPUT

| <i>bservatio</i> | <i>redicted</i> | <i>Residuals</i> |
|------------------|-----------------|------------------|
| 1                | 7.217364        | -0.35404         |
| 2                | 3.835668        | 0.01559          |
| 3                | 2.472895        | 1.139889         |
| 4                | 0.403498        | -0.80144         |

**STEADY-STATE SOLUTION TO THE ADVECTIVE-DISPERSIVE EQUATION  
ONE DIMENSIONAL FLOW, TYPE ONE BOUNDARY CONDITION  
(CONSTANT SOURCE WITH 0.00359 DAY-1 FIRST-ORDER DECAY)  
PRIMARY SOUTHEASTERN FLOW PATH TOWARD CREEK**

Hydrogeologic Data

|  |  |  |
|--|--|--|
| Hydraulic conductivity                       | $K := 8.68 \cdot 10^{-5} \cdot \frac{\text{ft}}{\text{sec}}$ | $K = 7.5 \cdot \frac{\text{ft}}{\text{day}}$ |
| Hydraulic gradient                           | $I := 0.005 \cdot \frac{\text{ft}}{\text{ft}}$               |  |
| Effective porosity (Baker, 1994)             | $n_e := 0.30$  |  |
| Total porosity                               | $n := 0.30$  |  |
| Longitudinal dispersivity (Parsons ES, 1985) | $\alpha_x := 8.2 \cdot \text{ft}$                            |  |

Retardation Coefficient Calculation

|   |   |  |
|---|---|--|
| Maximum Contaminant Concentration                           | $C_o := 14.1 \cdot \frac{\text{mg}}{\text{liter}}$    |  |
| Contaminant Decay Rate                                      | $\lambda := .00359 \cdot \frac{1}{\text{day}}$        |  |
| Minimum soil sorption coefficient (Wiedemeier et al., 1994) | $K_{oc} := 79 \cdot \frac{\text{mL}}{\text{gm}}$      |  |
| Particle mass density (Freeze and Cherry, 1979)             | $\rho_s := 2.28 \cdot \frac{\text{gm}}{\text{cm}^3}$  |  |
| Bulk density (Freeze and Cherry, 1979)                      | $\rho_b := \rho_s \cdot (1 - n)$                      | $\rho_b = 1.596 \cdot \frac{\text{gm}}{\text{cm}^3}$ |
| Minimum organic carbon content                              | $f_{oc} := 0.06 \cdot \%$                             |  |
| Retardation coefficient                                     | $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n}$ | $R = 1.252$  |

Groundwater Hydraulics Calculations

|                                     |                                |  |
|-------------------------------------|--------------------------------|--|
| Groundwater velocity (pore-water)   | $v_x := \frac{K \cdot I}{n_e}$ | $v_x = 45.652 \cdot \frac{\text{ft}}{\text{yr}}$   |
| Contaminant velocity                | $v_c := \frac{v_x}{R}$         | $v_c = 36.459 \cdot \frac{\text{ft}}{\text{yr}}$   |
| Longitudinal dispersion coefficient | $D_x := \alpha_x \cdot v_x$    | $D_x = 1.025 \cdot \frac{\text{ft}^2}{\text{day}}$ |

The measured distance from MW-13 (the center of the source area) to the Drainage Creek is 850 feet. This analytical solution is used to confirm Bioplume II predicted concentrations.

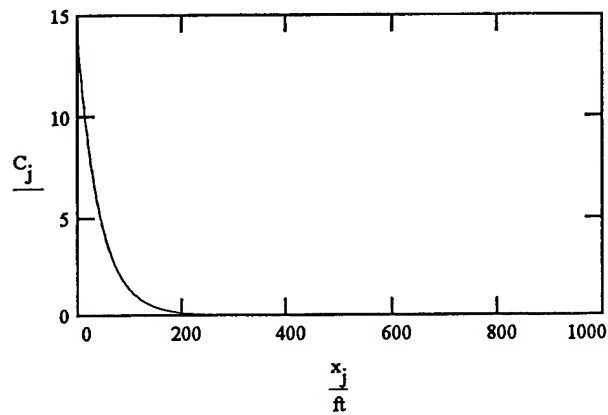
$$j := 0..850$$

$$\Delta x := 1 \cdot \text{ft}$$

$$x_j := \Delta x \cdot j$$

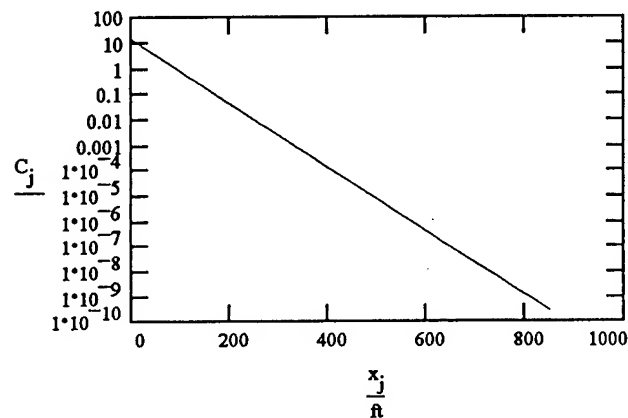
For Unretarded Flow with Biodegradation (Bear, 1979, p. 642, Domenico and Schwartz, 1990)

$$C_j := (C_o) \cdot 1000 \cdot \exp \left[ \frac{x_j}{2 \cdot a_x} \cdot \left[ 1 - \sqrt{1 + \frac{4 \cdot \lambda \cdot a_x}{(v_x)}} \right] \right] \text{ in mg/L.}$$



For Retarded Flow with Biodegradation (Wexler, 1992 p. 20, eq. 62)

$$C_j := C_o \cdot 1000 \cdot \exp \left[ \frac{x_j}{2 \cdot \frac{D_x}{R}} \cdot \left[ \frac{v_x}{R} - \sqrt{\left( \frac{v_x}{R} \right)^2 + 4 \cdot \lambda \cdot \frac{D_x}{R}} \right] \right] \text{ in mg/L.}$$



**STEADY-STATE SOLUTION TO THE ADVECTIVE-DISPERSIVE EQUATION  
ONE DIMENSIONAL FLOW, TYPE ONE BOUNDARY CONDITION  
(CONSTANT SOURCE WITH 0.00059 DAY-1 FIRST-ORDER DECAY)  
PRIMARY SOUTHEASTERN FLOW PATH TOWARD CREEK**

Hydrogeologic Data

|  |  |  |
|--|--|--|
| Hydraulic conductivity                       | $K := 8.68 \cdot 10^{-5} \cdot \frac{\text{ft}}{\text{sec}}$ | $K = 7.5 \cdot \frac{\text{ft}}{\text{day}}$ |
| Hydraulic gradient                           | $I := 0.005 \cdot \frac{\text{ft}}{\text{ft}}$               |  |
| Effective porosity (Baker, 1994)             | $n_e := 0.30$  |  |
| Total porosity                               | $n := 0.30$  |  |
| Longitudinal dispersivity (Parsons ES, 1985) | $\alpha_x := 8.2 \cdot \text{ft}$                            |  |

Retardation Coefficient Calculation

|   |   |  |
|---|---|--|
| Maximum Contaminant Concentration                           | $C_o := 141 \cdot \frac{\text{mg}}{\text{liter}}$     |  |
| Contaminant Decay Rate                                      | $\lambda := 0.00059 \cdot \frac{1}{\text{day}}$       |  |
| Minimum soil sorption coefficient (Wiedemeier et al., 1994) | $K_{oc} := 79 \cdot \frac{\text{mL}}{\text{gm}}$      |  |
| Particle mass density (Freeze and Cherry, 1979)             | $\rho_s := 2.28 \cdot \frac{\text{gm}}{\text{cm}^3}$  |  |
| Bulk density (Freeze and Cherry, 1979)                      | $\rho_b := \rho_s \cdot (1 - n)$                      | $\rho_b = 1.596 \cdot \frac{\text{gm}}{\text{cm}^3}$ |
| Minimum organic carbon content                              | $f_{oc} := 0.06\%$                                    |  |
| Retardation coefficient                                     | $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n}$ | $R = 1.252$  |

Groundwater Hydraulics Calculations

|                                     |                                |  |
|-------------------------------------|--------------------------------|--|
| Groundwater velocity (pore-water)   | $v_x := \frac{K \cdot I}{n_e}$ | $v_x = 45.652 \cdot \frac{\text{ft}}{\text{yr}}$   |
| Contaminant velocity                | $v_c := \frac{v_x}{R}$         | $v_c = 36.459 \cdot \frac{\text{ft}}{\text{yr}}$   |
| Longitudinal dispersion coefficient | $D_x := \alpha_x \cdot v_x$    | $D_x = 1.025 \cdot \frac{\text{ft}^2}{\text{day}}$ |

The measured distance from MW-13 (the center of the source area) to the Drainage Creek is 850 feet. This analytical solution is used to confirm Bioplume II predicted concentrations.

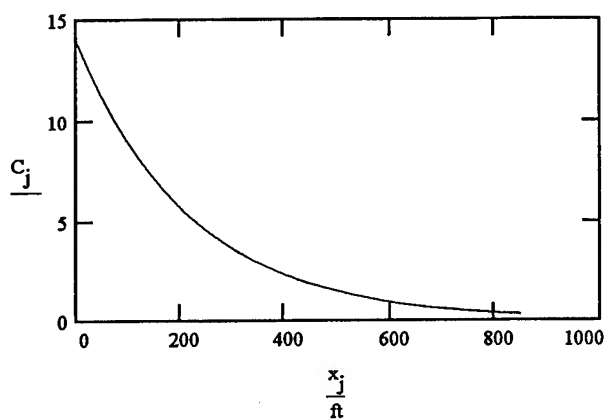
$$j := 0..850$$

$$\Delta x := 1 \cdot \text{ft}$$

$$x_j := \Delta x \cdot j$$

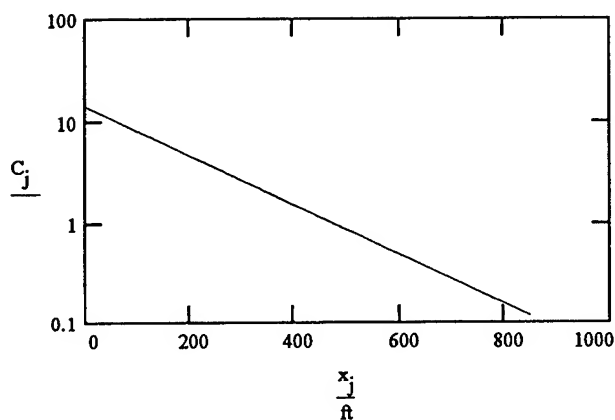
For Unretarded Flow with Biodegradation (Bear, 1979, p. 642, Domenico and Schwartz, 1990)

$$C_j := (C_o) \cdot 1000 \cdot \exp \left[ \frac{x_j}{2 \cdot a_x} \cdot \left[ 1 - \sqrt{1 + \frac{4 \cdot \lambda \cdot a_x}{(v_x)}} \right] \right] \text{ in mg/L.}$$



For Retarded Flow with Biodegradation (Wexler, 1992 p. 20, eq. 62)

$$C_j := C_o \cdot 1000 \cdot \exp \left[ \frac{x_j}{\frac{D_x}{R}} \cdot \left[ \frac{v_x}{R} - \sqrt{\left( \frac{v_x}{R} \right)^2 + 4 \cdot \lambda \cdot \frac{D_x}{R}} \right] \right] \text{ in mg/L.}$$



PARSONS ENGINEERING SCIENCE, INC.

Client Seymour Johnson AFB

Job No. 777450.76030

Sheet 1 of     

Subject First Order Decay Coefficient

By TCR

Date 9/11/95

Checked     

Rev.     

$$\frac{C}{C_0} = e^{-\alpha t}$$

Assume  $\frac{C}{C_0} = 0.95$

time: 3 yrs = 1096 days

5 yrs = 1826 days

$$0.95 = e^{-\alpha (1096 \text{ days})}$$

$$-0.05 = -\alpha (1096 \text{ days})$$

$$\alpha = 0.0000468 \text{ day}^{-1} \quad (\text{SR 3})$$

$$0.95 = e^{-\alpha (1826 \text{ days})}$$

$$-0.05 = -\alpha (1826 \text{ days})$$

$$\alpha = 0.0000281 \text{ day}^{-1} \quad (\text{SR 5})$$

**Transient Solution to the Advective-Dispersive Equation for One-Dimensional Flow, Type Three Boundary Condition (Decaying Source, Constant Location, Variable Time, Solution of van Genuchten and Alves, 1982) - Checked against Solute ONE3-D by THW 1/5/95 Primary Southeastern Flow Path to Creek**

Hydrogeologic Data

|   |  |
|---|--|
| Hydraulic conductivity                      | $K := 7.5 \frac{\text{ft}}{\text{day}}$      |
| Hydraulic gradient                          | $I := 0.005 \frac{\text{ft}}{\text{ft}}$     |
| Effective porosity                          | $n_e := 0.3$                                 |
| Total porosity                              | $n := 0.3$                                   |
| Longitudinal dispersivity (EPRI, 1985)      | $\alpha_x := 8.2 \text{ ft}$                 |
| Concentration of Injected Contaminant       | $C_s := 13.8 \frac{\text{mg}}{\text{liter}}$ |
| Initial Dissolved Contaminant Concentration | $C_o := 0. \frac{\text{mg}}{\text{liter}}$   |

Retardation Coefficient Calculation

|  |   |             |
|--|---|-------------|
| Solute Decay Rate                      | $\lambda := 0.00059 \frac{1}{\text{day}}$             |             |
| Source Decay Rate                      | $\gamma := 0.0000281 \frac{1}{\text{day}}$            |             |
| Soil sorption coefficient (EPA, 1990)  | $K_{oc} := 79. \frac{\text{mL}}{\text{gm}}$           |             |
| Bulk density (Freeze and Cherry, 1979) | $\rho_b := 1.596 \frac{\text{gm}}{\text{cm}^3}$       |             |
| Organic carbon content                 | $f_{oc} := 0.06 \%$                                   |             |
| Retardation coefficient                | $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n}$ | $R = 1.252$ |

Groundwater Hydraulics Calculations

|                                     |                                |  |
|-------------------------------------|--------------------------------|--|
| Groundwater velocity (pore-water)   | $v_x := \frac{K \cdot I}{n_e}$ | $v_x = 0.125 \frac{\text{ft}}{\text{day}}$   |
| Contaminant velocity                | $v_c := \frac{v_x}{R}$         | $v_c = 0.1 \frac{\text{ft}}{\text{day}}$     |
| Longitudinal dispersion coefficient | $D_x := \alpha_x \cdot v_x$    | $D_x = 1.025 \frac{\text{ft}^2}{\text{day}}$ |

### Initial Plume Distribution Calculation

$$\text{year} := 365 \cdot \text{day} \quad i := 1..100$$

$$x := 850 \cdot \text{ft}$$

$$\Delta t := 1 \cdot \text{year}$$

$$ug := \frac{\text{mg}}{1000}$$

$$t_i := \Delta t \cdot i$$

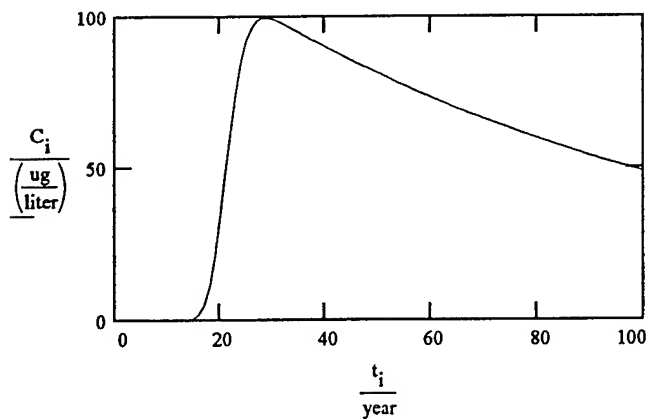
For Retarded Flow with Biodegradation and a Decaying Source (van Genuchten and Alves, 1982)

$$C_i := C_0 \cdot \exp(-\lambda \cdot t_i) \cdot \left[ 1 - \frac{1}{2} \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x - v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) - \frac{v_x^2 \cdot t_i}{\pi \cdot D_x \cdot R} \cdot \exp \left[ -\frac{(R \cdot x - v_x \cdot t_i)^2}{4 \cdot D_x \cdot R \cdot t_i} \right] + \frac{1}{2} \cdot \left( 1 + \frac{v_x \cdot x}{D_x} + \frac{v_x^2 \cdot t_i}{D_x \cdot R} \right) \cdot \exp \left( \frac{v_x \cdot x}{D_x} \right) \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right] \dots$$

$$+ C_s \cdot \exp(-\gamma \cdot t_i) \cdot \left[ \frac{v_x}{v_x + v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}} \cdot \exp \left[ \frac{v_x - v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot D_x} \cdot x \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x - t_i \cdot v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right] \dots \right.$$

$$+ \left[ \frac{v_x}{v_x - v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}} \cdot \exp \left[ \frac{v_x + v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot D_x} \cdot x \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x + t_i \cdot v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right] \dots \right.$$

$$\left. + \frac{v_x^2}{2 \cdot D_x \cdot R \cdot (\lambda - \gamma)} \cdot \exp \left[ \frac{v_x \cdot x}{D_x} - (\lambda - \gamma) \cdot t_i \right] \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right]$$



**Transient Solution to the Advective-Dispersive Equation for One-Dimensional Flow, Type Three Boundary Condition (Decaying Source, Constant Location, Variable Time, Solution of van Genuchten and Alves, 1982) - Checked against Solute ONE3-D by THW 1/5/95 Primary Southeastern Flow Path to Creek**

Hydrogeologic Data

|   |   |
|---|---|
| Hydraulic conductivity                      | $K := 75 \frac{\text{ft}}{\text{day}}$      |
| Hydraulic gradient                          | $I := 0.005 \frac{\text{ft}}{\text{ft}}$    |
| Effective porosity                          | $n_e := 0.3$                                |
| Total porosity                              | $n := 0.3$                                  |
| Longitudinal dispersivity (EPRI, 1985)      | $\alpha_x := 82 \text{ ft}$                 |
| Concentration of Injected Contaminant       | $C_s := 138 \frac{\text{mg}}{\text{liter}}$ |
| Initial Dissolved Contaminant Concentration | $C_o := 0. \frac{\text{mg}}{\text{liter}}$  |

Retardation Coefficient Calculation

|  |   |             |
|--|---|-------------|
| Solute Decay Rate                      | $\lambda := 0.00359 \frac{1}{\text{day}}$             |             |
| Source Decay Rate                      | $\gamma := 0.0000281 \frac{1}{\text{day}}$            |             |
| Soil sorption coefficient (EPA, 1990)  | $K_{oc} := 79. \frac{\text{mL}}{\text{gm}}$           |             |
| Bulk density (Freeze and Cherry, 1979) | $\rho_b := 1.596 \frac{\text{gm}}{\text{cm}^3}$       |             |
| Organic carbon content                 | $f_{oc} := 0.06\%$                                    |             |
| Retardation coefficient                | $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n}$ | $R = 1.252$ |

Groundwater Hydraulics Calculations

|                                     |                                |  |
|-------------------------------------|--------------------------------|--|
| Groundwater velocity (pore-water)   | $v_x := \frac{K \cdot I}{n_e}$ | $v_x = 0.125 \frac{\text{ft}}{\text{day}}$   |
| Contaminant velocity                | $v_c := \frac{v_x}{R}$         | $v_c = 0.1 \frac{\text{ft}}{\text{day}}$     |
| Longitudinal dispersion coefficient | $D_x := \alpha_x \cdot v_x$    | $D_x = 1.025 \frac{\text{ft}^2}{\text{day}}$ |

# Initial Plume Distribution Calculation

year := 365-day    i := 1.. 100

x := 850-ft

Δt := 1-year

ug :=  $\frac{mg}{1000}$

t<sub>i</sub> := Δt·i

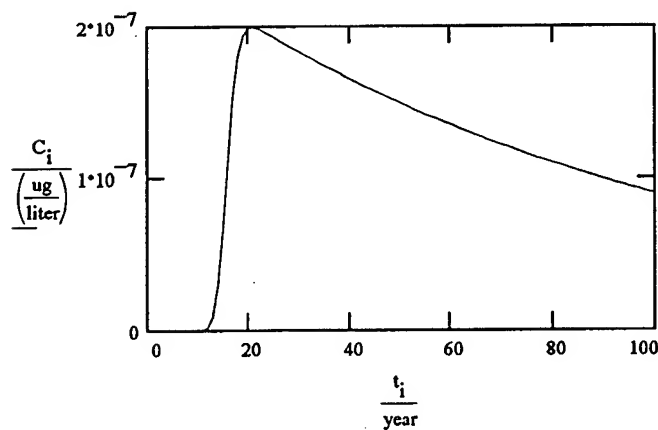
For Retarded Flow with Biodegradation and a Decaying Source (van Genuchten and Alves, 1982)

$$C_i := C_o \cdot \exp(-\lambda \cdot t_i) \cdot \left[ 1 - \frac{1}{2} \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x - v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) - \left( \frac{v_x^2 \cdot t_i}{\pi \cdot D_x \cdot R} \right) \cdot \exp \left[ -\frac{(R \cdot x - v_x \cdot t_i)^2}{4 \cdot D_x \cdot R \cdot t_i} \right] + \frac{1}{2} \cdot \left( 1 + \frac{v_x \cdot x}{D_x} + \frac{v_x^2 \cdot t_i}{D_x \cdot R} \right) \cdot \exp \left( \frac{v_x \cdot x}{D_x} \right) \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right] \dots$$

$$+ C_s \cdot \exp(-\gamma \cdot t_i) \cdot \left[ \frac{v_x}{v_x + v_x' \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}} \cdot \exp \left[ \frac{v_x - v_x' \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot x}{2 \cdot D_x} \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x - t_i \cdot v_x' \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right] \dots \right.$$

$$+ \left[ \frac{v_x}{v_x - v_x' \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}} \cdot \exp \left[ \frac{v_x + v_x' \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot x}{2 \cdot D_x} \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x + t_i \cdot v_x' \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right] \dots \right.$$

$$\left. + \left[ \frac{v_x^2}{2 \cdot D_x \cdot R \cdot (\lambda - \gamma)} \right] \cdot \exp \left[ \frac{v_x \cdot x}{D_x} - (\lambda - \gamma) \cdot t_i \right] \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right]$$



**Transient Solution to the Advective-Dispersive Equation for One-Dimensional Flow, Type Three Boundary Condition (Decaying Source, Constant Location, Variable Time, Solution of van Genuchten and Alves, 1982) - Checked against Solute ONE3-D by THW 1/5/95 Primary Southeastern Flow Path to Creek, 3 yr**

Hydrogeologic Data

|   |  |
|---|--|
| Hydraulic conductivity                      | $K := 7.5 \frac{\text{ft}}{\text{day}}$      |
| Hydraulic gradient                          | $I := 0.005 \frac{\text{ft}}{\text{ft}}$     |
| Effective porosity                          | $n_e := 0.3$                                 |
| Total porosity                              | $n := 0.3$                                   |
| Longitudinal dispersivity (EPRI, 1985)      | $\alpha_x := 8.2 \text{ ft}$                 |
| Concentration of Injected Contaminant       | $C_s := 13.8 \frac{\text{mg}}{\text{liter}}$ |
| Initial Dissolved Contaminant Concentration | $C_o := 0. \frac{\text{mg}}{\text{liter}}$   |

Retardation Coefficient Calculation

|  |   |             |
|--|---|-------------|
| Solute Decay Rate                      | $\lambda := 0.00059 \frac{1}{\text{day}}$             |             |
| Source Decay Rate                      | $\gamma := 0.000468 \frac{1}{\text{day}}$             |             |
| Soil sorption coefficient (EPA, 1990)  | $K_{oc} := 79 \frac{\text{mL}}{\text{gm}}$            |             |
| Bulk density (Freeze and Cherry, 1979) | $\rho_b := 1.596 \frac{\text{gm}}{\text{cm}^3}$       |             |
| Organic carbon content                 | $f_{oc} := 0.06\%$                                    |             |
| Retardation coefficient                | $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n}$ | $R = 1.252$ |

Groundwater Hydraulics Calculations

|                                     |                                |  |
|-------------------------------------|--------------------------------|--|
| Groundwater velocity (pore-water)   | $v_x := \frac{K \cdot I}{n_e}$ | $v_x = 0.125 \frac{\text{ft}}{\text{day}}$   |
| Contaminant velocity                | $v_c := \frac{v_x}{R}$         | $v_c = 0.1 \frac{\text{ft}}{\text{day}}$     |
| Longitudinal dispersion coefficient | $D_x := \alpha_x \cdot v_x$    | $D_x = 1.025 \frac{\text{ft}^2}{\text{day}}$ |

# Initial Plume Distribution Calculation

year := 365-day    i := 1..100

x := 850-ft

$\Delta t := 1\text{-year}$

$ug := \frac{mg}{1000}$

$t_i := \Delta t \cdot i$

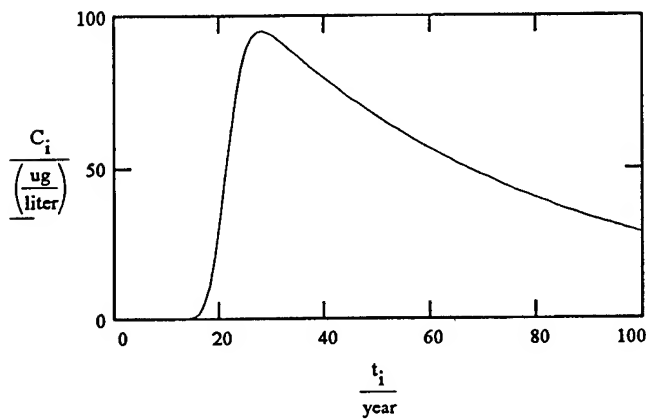
For Retarded Flow with Biodegradation and a Decaying Source (van Genuchten and Alves, 1982)

$$C_i := C_o \cdot \exp(-\lambda \cdot t_i) \cdot \left[ 1 - \frac{1}{2} \left( 1 - \operatorname{erf} \left( \frac{R \cdot x - v_x \cdot t_i}{2 \sqrt{D_x \cdot R \cdot t_i}} \right) \right) - \left( \frac{v_x^2 \cdot t_i}{\pi \cdot D_x \cdot R} \right) \cdot \exp \left[ -\frac{(R \cdot x - v_x \cdot t_i)^2}{4 \cdot D_x \cdot R \cdot t_i} \right] + \frac{1}{2} \left( 1 + \frac{v_x \cdot x}{D_x} + \frac{v_x^2 \cdot t_i}{D_x \cdot R} \right) \cdot \exp \left( \frac{v_x \cdot x}{D_x} \right) \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right] \dots$$

$$+ C_s \cdot \exp(-\gamma \cdot t_i) \cdot \left[ \frac{v_x}{v_x + v_x'} \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot \exp \left[ \frac{v_x - v_x'}{2 \cdot D_x} \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot x \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x - t_i \cdot v_x'}{2 \sqrt{D_x \cdot R \cdot t_i}} \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \right) \right] \dots \right.$$

$$+ \left[ \frac{v_x}{v_x - v_x'} \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot \exp \left[ \frac{v_x + v_x'}{2 \cdot D_x} \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot x \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x + t_i \cdot v_x'}{2 \sqrt{D_x \cdot R \cdot t_i}} \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \right) \right] \dots \right.$$

$$\left. + \left[ \frac{v_x^2}{2 \cdot D_x \cdot R \cdot (\lambda - \gamma)} \right] \cdot \exp \left[ \frac{v_x \cdot x}{D_x} - (\lambda - \gamma) \cdot t_i \right] \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right]$$



**Transient Solution to the Advective-Dispersive Equation for One-Dimensional Flow, Type Three Boundary Condition (Decaying Source, Constant Location, Variable Time, Solution of van Genuchten and Alves, 1982) - Checked against Solute ONE3-D by THW 1/5/95 Primary Southeastern Flow Path to Creek, 3yr**

Hydrogeologic Data

|   |  |
|---|--|
| Hydraulic conductivity                      | $K := 7.5 \cdot \frac{\text{ft}}{\text{day}}$      |
| Hydraulic gradient                          | $I := 0.005 \cdot \frac{\text{ft}}{\text{ft}}$     |
| Effective porosity                          | $n_e := 0.3$                                       |
| Total porosity                              | $n := 0.3$   |
| Longitudinal dispersivity (EPRI, 1985)      | $\alpha_x := 8.2 \cdot \text{ft}$                  |
| Concentration of Injected Contaminant       | $C_s := 13.8 \cdot \frac{\text{mg}}{\text{liter}}$ |
| Initial Dissolved Contaminant Concentration | $C_o := 0 \cdot \frac{\text{mg}}{\text{liter}}$    |

Retardation Coefficient Calculation

|  |   |             |
|--|---|-------------|
| Solute Decay Rate                      | $\lambda := 0.00359 \cdot \frac{1}{\text{day}}$       |             |
| Source Decay Rate                      | $\gamma := 0.0000468 \cdot \frac{1}{\text{day}}$      |             |
| Soil sorption coefficient (EPA, 1990)  | $K_{oc} := 79 \cdot \frac{\text{mL}}{\text{gm}}$      |             |
| Bulk density (Freeze and Cherry, 1979) | $\rho_b := 1.596 \cdot \frac{\text{gm}}{\text{cm}^3}$ |             |
| Organic carbon content                 | $f_{oc} := 0.06 \cdot \%$                             |             |
| Retardation coefficient                | $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n}$ | $R = 1.252$ |

Groundwater Hydraulics Calculations

|                                     |                                |  |
|-------------------------------------|--------------------------------|--|
| Groundwater velocity (pore-water)   | $v_x := \frac{K \cdot I}{n_e}$ | $v_x = 0.125 \cdot \frac{\text{ft}}{\text{day}}$   |
| Contaminant velocity                | $v_c := \frac{v_x}{R}$         | $v_c = 0.1 \cdot \frac{\text{ft}}{\text{day}}$     |
| Longitudinal dispersion coefficient | $D_x := \alpha_x \cdot v_x$    | $D_x = 1.025 \cdot \frac{\text{ft}^2}{\text{day}}$ |

# Initial Plume Distribution Calculation

year := 365-day    i := 1.. 100

x := 850-ft

$\Delta t := 1\text{-year}$

$ug := \frac{mg}{1000}$

$t_i := \Delta t \cdot i$

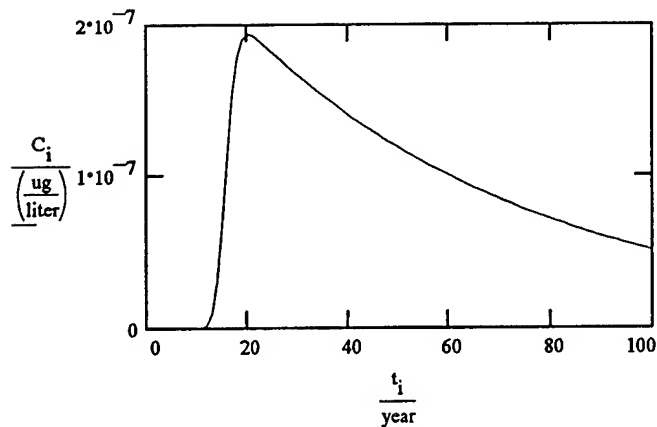
For Retarded Flow with Biodegradation and a Decaying Source (van Genuchten and Alves, 1982)

$$C_i := C_0 \cdot \exp(-\lambda \cdot t_i) \cdot \left[ 1 - \frac{1}{2} \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x - v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) - \left( \frac{v_x^2 \cdot t_i}{\pi \cdot D_x \cdot R} \right) \cdot \exp \left[ -\frac{(R \cdot x - v_x \cdot t_i)^2}{4 \cdot D_x \cdot R \cdot t_i} \right] + \frac{1}{2} \cdot \left( 1 + \frac{v_x \cdot x}{D_x} + \frac{v_x^2 \cdot t_i}{D_x \cdot R} \right) \cdot \exp \left( \frac{v_x \cdot x}{D_x} \right) \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right] \dots$$

$$+ C_s \cdot \exp(-\gamma \cdot t_i) \cdot \left[ \frac{v_x}{v_x + v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}} \cdot \exp \left[ \frac{v_x - v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot x}{2 \cdot D_x} \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x - t_i \cdot v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right] \dots \right.$$

$$+ \left[ \frac{v_x}{v_x - v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}} \cdot \exp \left[ \frac{v_x + v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)} \cdot x}{2 \cdot D_x} \right] \cdot \left[ 1 - \operatorname{erf} \left( \frac{R \cdot x + t_i \cdot v_x \cdot \sqrt{1 + \frac{4 \cdot D_x \cdot R}{v_x^2} \cdot (\lambda - \gamma)}}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right] \dots \right.$$

$$\left. + \left[ \frac{v_x^2}{2 \cdot D_x \cdot R \cdot (\lambda - \gamma)} \right] \cdot \exp \left[ \frac{v_x \cdot x}{D_x} - (\lambda - \gamma) \cdot t_i \right] \cdot \left( 1 - \operatorname{erf} \left( \frac{R \cdot x + v_x \cdot t_i}{2 \cdot \sqrt{D_x \cdot R \cdot t_i}} \right) \right) \right]$$



# TRANSPORT SIMULATION OF BTEX AT THE SEYMOUR JOHNSON AFB FORMER AGE FUELING SITE USING A ONE-DIMENSIONAL SOLUTE TRANSPORT MODEL (Foc = 0.06%)

## Hydrogeologic Data

|                           |   |  |
|---------------------------|---|--|
| Hydraulic conductivity    | $K := 2.646 \cdot 10^{-3} \cdot \frac{\text{cm}}{\text{sec}}$ | $K = 7.5 \cdot \frac{\text{ft}}{\text{day}}$ |
| Hydraulic gradient        | $I := 0.005 \cdot \frac{\text{ft}}{\text{ft}}$                |  |
| Effective porosity        | $n_e := 0.3$  |  |
| Total porosity            | $n := 0.3$  |  |
| Longitudinal dispersivity | $\alpha_L := 2.4995 \cdot \text{m}$                           | $\alpha_L = 8.2 \cdot \text{ft}$             |

## Retardation Coefficient Calculation

|  |   |  |
|--|---|--|
| Organic carbon partition coefficient (EPA, 1990) | $K_{oc} := 79 \cdot \frac{\text{mL}}{\text{gm}}$      |  |
| Particle mass density (Freeze and Cherry, 1979)  | $\rho_s := 2.28 \cdot \frac{\text{gm}}{\text{cm}^3}$  |  |
| Bulk density (Freeze and Cherry, 1979)           | $\rho_b := \rho_s \cdot (1 - n)$                      | $\rho_b = 1.596 \cdot \frac{\text{gm}}{\text{cm}^3}$ |
| Organic carbon fraction content                  | $f_{oc} := 0.06\%$                                    |  |
| Retardation coefficient                          | $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n}$ |  |
|  | $R = 1.252$   |  |

## Groundwater Hydraulics Calculations

|                                     |                             |  |
|-------------------------------------|-----------------------------|--|
| Groundwater velocity (Darcy)        | $v_d := K \cdot I$          | $v_d = 0.038 \cdot \frac{\text{ft}}{\text{day}}$   |
| Groundwater velocity (pore-water)   | $v_p := \frac{v_d}{n_e}$    | $v_p = 0.125 \cdot \frac{\text{ft}}{\text{day}}$   |
| Constituent velocity                | $v_c := \frac{v_p}{R}$      | $v_c = 0.1 \cdot \frac{\text{ft}}{\text{day}}$     |
| Longitudinal dispersion coefficient | $D_L := \alpha_L \cdot v_c$ | $D_L = 0.819 \cdot \frac{\text{ft}^2}{\text{day}}$ |

### Initial Plume Distribution Calculation

Constituent concentration at source location (MW-13 )

$$C_{\text{source}} := 1.38 \cdot 10^{-2} \frac{\text{gm}}{\text{liter}}$$

Idealized length of the constituent plume (assumed)  $L := 50 \text{ ft}$

Time required to form a plume of length, L, and source (maximum) concentration, C<sub>source</sub> (Fischer, 1979)

$$\tau := \frac{\left(\frac{L}{6}\right)^2}{2 \cdot D_L} \quad \tau = 42.413 \cdot \text{day}$$

Distance required to form a plume of length, L, and source (maximum) concentration, C<sub>source</sub>

$$\delta := v_c \cdot \tau \quad \delta = 4.234 \cdot \text{ft}$$

Idealized mass introduced per unit area (saturated thickness by width of porous media)

$$M := C_{\text{source}} \cdot n \cdot \sqrt{4 \cdot \pi \cdot D_L \cdot \tau} \quad M = 0.002 \cdot \frac{\text{kg}}{\text{ft}^2}$$

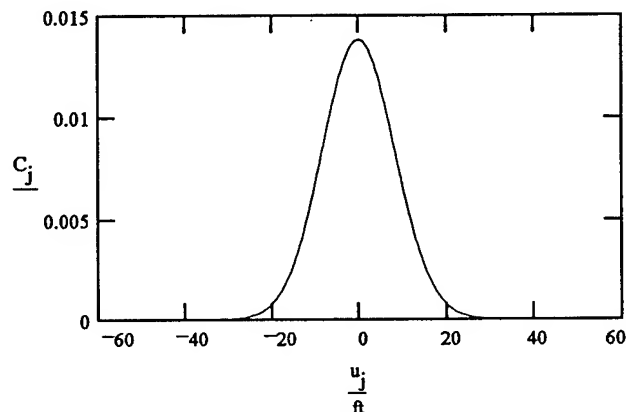
Spatial limits for the graph of initial constituent distribution

$$\begin{aligned} \Delta x &:= \frac{2 \cdot L}{200} & j &:= 1..201 \\ x_j &:= \Delta x \cdot j - (L + \Delta x - \delta) \\ u_j &:= x_j - \delta \end{aligned}$$

One-dimensional advective-dispersive solute transport solution (Bear, 1979)

$$C_j := \frac{M}{n \cdot \sqrt{4 \cdot \pi \cdot D_L \cdot \tau}} \cdot \exp \left[ -\frac{(x_j - v_c \cdot \tau)^2}{4 \cdot D_L \cdot \tau} \right]$$

INITIAL CONSTITUENT DISTRIBUTION (Concentration vs. Distance where  $u=0$  represents the actual location of the constituent source)



## Constituent Arrival at Drainage Creek

Distance from the source (MW-13) to the receptor

$$d_r := 850 \text{ ft}$$

$$d_r = 259.08 \text{ m}$$

Temporal limits of arrival curve graph at the receptor location

$$j := 1..7500$$

$$\Delta T := 2 \text{ day}$$

$$T_j := j \cdot \Delta T$$

Transformation of time and distance scales to include initial plume distribution

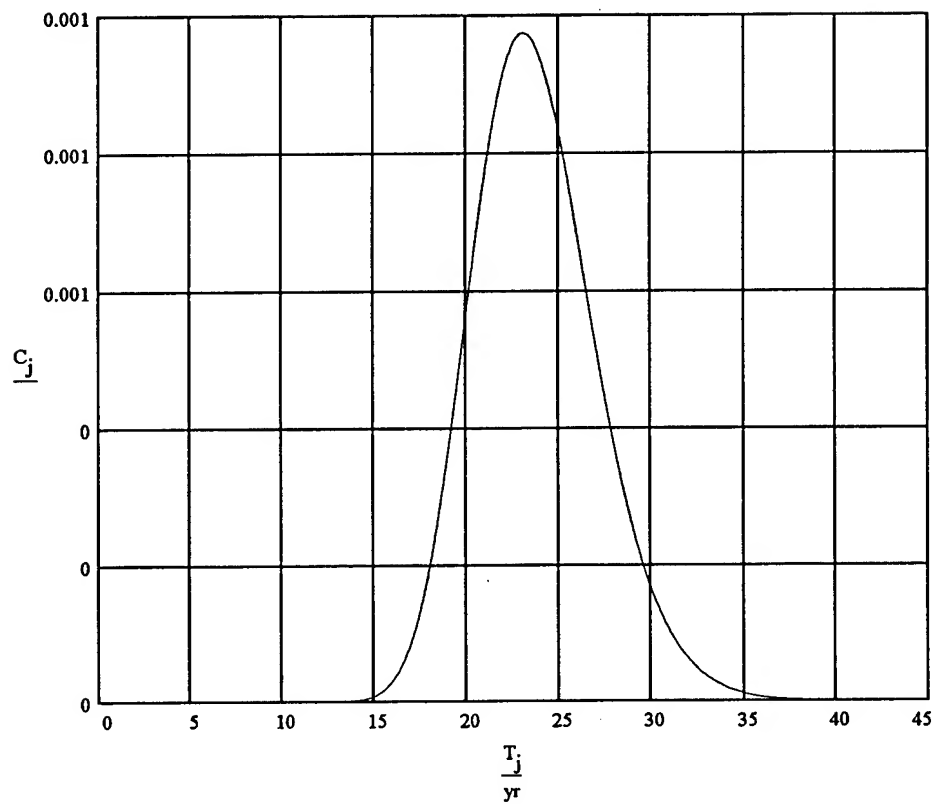
$$x := \delta + d_r$$

$$t_j := \tau + T_j$$

One-dimensional advective-dispersive solute transport solution (Bear, 1979)

$$C_j := \frac{M}{n \sqrt{4 \pi D L t_j}} \cdot \exp \left[ -\frac{(x - v_c t_j)^2}{4 D L t_j} \right]$$

ARRIVAL OF BTEX AT CREEK



## Peak Concentration and Peak Arrival Time Calculations

The peak arrival time is calculated by setting the time derivative of the 1-D solute transport solution (Bear, 1979) to zero and solving for the time variable.

Initial estimate for arrival of peak at the receptor  $t_a := \frac{d_r}{v_c}$

Given

$$0 = \frac{\text{gm}}{\text{liter} \cdot \text{day}} \cdot \frac{1}{4} \cdot \frac{M}{\left[ n \cdot \left[ \sqrt{\pi} \cdot \left[ \sqrt{D_L \cdot t_a} \cdot \left( \frac{3}{2} \right) \right] \right] \right]} \cdot \exp \left[ \frac{-1}{4} \cdot \frac{(x - v_c t_a)^2}{(D_L \cdot t_a)} \right] \dots$$

$$+ \frac{1}{2} \cdot \frac{M}{\left[ n \cdot \left[ \sqrt{\pi} \cdot \left( \sqrt{D_L} \cdot \sqrt{t_a} \right) \right] \right]} \cdot \left[ \frac{1}{2} \cdot \frac{(x - v_c t_a)}{(D_L \cdot t_a)} \cdot v_c + \frac{1}{4} \cdot \frac{(x - v_c t_a)^2}{(D_L \cdot t_a^2)} \right] \cdot \exp \left[ \frac{-1}{4} \cdot \frac{(x - v_c t_a)^2}{(D_L \cdot t_a)} \right]$$

$$t_p := \text{find}(t_a)$$

Peak arrival time at Creek

$$t_{\text{peak}} := t_p - \tau$$

$$t_{\text{peak}} = 23.087 \cdot \text{yr}$$

Peak concentration at Creek

$$C_{\text{peak}} := \frac{M}{n \cdot \sqrt{4 \cdot \pi \cdot D_L \cdot t_p}} \cdot \exp \left[ -\frac{(x - v_c t_p)^2}{4 \cdot D_L \cdot t_p} \right]$$

$$C_{\text{peak}} = 9.739 \cdot 10^{-4} \cdot \frac{\text{gm}}{\text{liter}}$$

$$\text{ppb} := C_{\text{peak}} \cdot 10^6$$

$$\text{ppb} = 973.907 \cdot \text{kg} \cdot \text{m}^{-3}$$

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## **APPENDIX F**

### **COSTING WORKSHEETS AND PRESENT WORTH CALCULATIONS**

# Present Worth Analysis

Annual Inflation Factor = 7%

| Alternative 1: Continued Mobile LNAPL Removal, Intrinsic Remediation, and Institutional Controls with LTM | years | Present Worth (\$) | Cost (\$) at Year Indicated |          |          |         |         |
|---|-------|--------------------|-----------------------------|----------|----------|---------|---------|
|   |       |                    | Year: 1                     | 2        | 3        | 4       | 5       |
| LNAPL Recovery  |       |                    |                             |          |          |         |         |
| LNAPL Recovery System Install   | 1     | \$55,382           | \$59,259                    | \$0      | \$0      | \$0     | \$0     |
| Monthly Site Work   | 3     | \$46,765           | \$17,820                    | \$17,820 | \$17,820 | \$0     | \$0     |
| Base Support/System Monitoring  | 3     | \$13,122           | \$5,000                     | \$5,000  | \$5,000  | \$0     | \$0     |
| Annual Reports  | 3     | \$6,647            | \$2,533                     | \$2,533  | \$2,533  | \$0     | \$0     |
| Subtotal Present Worth (\$)   |       | \$121,917          |                             |          |          |         |         |
|   |       |                    |                             |          |          |         |         |
| Maintain Institutional Controls   | 15    | \$22,770           | \$2,500                     | \$2,500  | \$2,500  | \$2,500 | \$2,500 |
| Long-term Monitoring  |       |                    |                             |          |          |         |         |
| Install New POC Wells   | 1     | \$8,294            | \$8,875                     | \$0      | \$0      | \$0     | \$0     |
| Annual Sampling   | 15    | \$56,560           | \$6,210                     | \$6,210  | \$6,210  | \$6,210 | \$6,210 |
| Annual Reporting  | 15    | \$30,065           | \$3,301                     | \$3,301  | \$3,301  | \$3,301 | \$3,301 |
| Subtotal Present Worth (\$)   |       | \$117,690          |                             |          |          |         |         |

Total Present Worth Cost (\$):

\$239,606

[illegible]

# Present Worth Analysis

Annual Inflation Factor = 7%

| Alternative 2: Continued Mobile LNAPL Removal, Bioslurping/Bioventing in the Source Area Intrinsic Remediation, and Institutional Controls with LTM |                                    | Present Worth | Cost (\$ ) at Year Indicated |          |         |         |         |
|---|------------------------------------|---------------|------------------------------|----------|---------|---------|---------|
| years   |                                    | (\$)          | Year: 1                      | 2        | 3       | 4       | 5       |
| Bioslurping/Bioventing System Design, Installation, and Operation (5 years)   |                                    |               |                              |          |         |         |         |
|   | Develop Work Plan                  | 1             | \$6,513                      | \$0      | \$0     | \$0     | \$0     |
|   | Install Test Wells, Conduct Pilot  | 1             | \$18,234                     | \$0      | \$0     | \$0     | \$0     |
|   | Design System                      | 1             | \$11,233                     | \$0      | \$0     | \$0     | \$0     |
|   | Prepare Bid Package                | 1             | \$4,878                      | \$0      | \$0     | \$0     | \$0     |
|   | Install System                     | 1             | \$127,238                    | \$0      | \$0     | \$0     | \$0     |
|   | Bioslurping Annual Costs (yrs 1, 2 | 2             | \$103,580                    | \$57,289 | \$0     | \$0     | \$0     |
|   | Bioventing Annual Costs (yrs 3, 4  | 3             | \$19,548                     | \$0      | \$8,528 | \$8,528 | \$8,528 |
|   | Base Support/System Monitoring     | 5             | \$20,501                     | \$5,000  | \$5,000 | \$0     | \$0     |
|   | PM/Reporting Annual Costs          | 5             | \$20,985                     | \$5,118  | \$5,118 | \$5,118 | \$5,118 |
|   | Costs                              |               |                              |          |         |         |         |
| Subtotal Present Worth (\$)   |                                    |               | \$332,708                    |          |         |         |         |
| Maintain Institutional Controls   |                                    | 10            |                              | \$2,500  | \$2,500 | \$2,500 | \$2,500 |
| Long-term Monitoring  |                                    |               |                              |          |         |         |         |
|   | Install New POC Wells              | 1             | \$8,294                      | \$0      | \$0     | \$0     | \$0     |
|   | Annual Sampling                    | 10            | \$43,616                     | \$6,210  | \$6,210 | \$6,210 | \$6,210 |
|   | Annual Reporting                   | 10            | \$23,185                     | \$3,301  | \$3,301 | \$3,301 | \$3,301 |
| Subtotal Present Worth (\$)   |                                    |               | \$92,655                     |          |         |         |         |

Total Present Worth Cost (\$):

\$425,363

| Cost (\$) at Year Indicated |   |   |   |    |    |    |    |    |    |    |
|-----------------------------|---|---|---|----|----|----|----|----|----|----|
| 6                           | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

|     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

|         |         |         |         |         |     |     |     |     |     |     |
|---------|---------|---------|---------|---------|-----|-----|-----|-----|-----|-----|
| \$2,500 | \$2,500 | \$2,500 | \$2,500 | \$2,500 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0     | \$0     | \$0     | \$0     | \$0     | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$6,210 | \$6,210 | \$6,210 | \$6,210 | \$6,210 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$3,301 | \$3,301 | \$3,301 | \$3,301 | \$3,301 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

## Present Worth Analysis

Annual Inflation Factor = 7%

| Alternative 3: Soil Excavation in the LNAPL Area, combined with Bioventing at the fringes of the Source Area, Intrinsic Remediation and Institutional Controls with LTM |   | Present Worth (\$) | Cost (\$) at Year Indicated |         |         |         |         |
|---|---|--------------------|-----------------------------|---------|---------|---------|---------|
| years   |   |                    | Year: 1                     | 2       | 3       | 4       | 5       |
| Soil Excavation, Bioventing System Design, Installation, and Operation  |   |                    |                             |         |         |         |         |
| Develop Work Plan   | 1 | \$6,513            | \$6,969                     | \$0     | \$0     | \$0     | \$0     |
| Install Test Wells, Conduct Pilot Design System   | 1 | \$12,467           | \$13,340                    | \$0     | \$0     | \$0     | \$0     |
| Prepare Bid Package   | 1 | \$11,233           | \$12,019                    | \$0     | \$0     | \$0     | \$0     |
| Soil Excavation/Install System  | 1 | \$4,878            | \$5,219                     | \$0     | \$0     | \$0     | \$0     |
| Bioventing Annual Costs   | 3 | \$129,379          | \$138,435                   | \$0     | \$0     | \$0     | \$0     |
| Base Support/System Monitoring PM/Annual Reporting  | 3 | \$22,380           | \$8,528                     | \$8,528 | \$8,528 | \$0     | \$0     |
|   | 3 | \$13,122           | \$5,000                     | \$5,000 | \$5,000 | \$0     | \$0     |
|   | 3 | \$13,431           | \$5,118                     | \$5,118 | \$5,118 | \$0     | \$0     |
|   |   | \$213,402          |                             |         |         |         |         |
| Maintain Institutional Controls   | 8 | \$14,928           | \$2,500                     | \$2,500 | \$2,500 | \$2,500 | \$2,500 |
| Long-term Monitoring  |   |                    |                             |         |         |         |         |
| Install New POC Wells   | 1 | \$8,294            | \$8,875                     | \$0     | \$0     | \$0     | \$0     |
| Annual Sampling   | 8 | \$37,082           | \$6,210                     | \$6,210 | \$6,210 | \$6,210 | \$6,210 |
| Annual Reporting  | 8 | \$19,711           | \$3,301                     | \$3,301 | \$3,301 | \$3,301 | \$3,301 |
|   |   | \$80,016           |                             |         |         |         |         |
| Subtotal Present Worth (\$)   |   |                    |                             |         |         |         |         |

Total Present Worth Cost (\$):

\$293,418

| Cost (\$) at Year Indicated |   |   |   |    |    |    |    |    |    |    |
|-----------------------------|---|---|---|----|----|----|----|----|----|----|
| 6                           | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

|     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

|         |         |         |     |     |     |     |     |     |     |     |
|---------|---------|---------|-----|-----|-----|-----|-----|-----|-----|-----|
| \$2,500 | \$2,500 | \$2,500 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$0     | \$0     | \$0     | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$6,210 | \$6,210 | \$6,210 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| \$3,301 | \$3,301 | \$3,301 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

## Alternative 1: LNAPL Recovery

### Standard Rate Schedule

| Billing Category<br>Cost Code/(Billing Category)        | Billing Rate | Task 1<br>(hrs) | Install<br>Recovery Sys<br>(\$) | Task 2<br>(hrs) | Monthly<br>Site Work<br>(\$) | Task 3<br>(hrs) | Annual<br>Reports<br>(\$) |
|---|--------------|-----------------|---------------------------------|-----------------|------------------------------|-----------------|---------------------------|
| Word Processor 88/(15)                                  | \$30         | 8               | \$240                           | 0               | \$0                          | 4               | \$120                     |
| CADD Operator 58/(25)                                   | \$47         | 16              | \$752                           | 0               | \$0                          | 8               | \$376                     |
| Technician 42/(50)                                      | \$40         | 40              | \$1,600                         | 144             | \$5,760                      | 0               | \$0                       |
| Staff Level 16/(65)                                     | \$57         | 60              | \$3,420                         | 0               | \$0                          | 20              | \$1,140                   |
| Project Level 12/(70)                                   | \$65         | 60              | \$3,900                         | 24              | \$1,560                      | 8               | \$520                     |
| Senior Level 10/(80)                                    | \$85         | 4               | \$340                           | 0               | \$0                          | 0               | \$0                       |
| Principal 02/(85)                                       | \$97         | 1               | \$97                            | 0               | \$0                          | 1               | \$97                      |
| <b>Total Labor (hrs   \$)</b>                           |              | <b>189</b>      | <b>\$10,349</b>                 | <b>168</b>      | <b>\$7,320</b>               | <b>41</b>       | <b>\$2,253</b>            |
| <b>ODCs</b>   |              |                 |                                 |                 |                              |                 |                           |
| Phone   |              |                 | \$60                            |                 | \$60                         |                 | \$20                      |
| Photocopy   |              |                 | \$50                            |                 | \$20                         |                 | \$40                      |
| Mail/Shipping   |              |                 | \$200                           |                 | \$240                        |                 | \$20                      |
| Computer  |              |                 | \$100                           |                 | \$0                          |                 | \$100                     |
| CAD   |              |                 | \$160                           |                 | \$0                          |                 | \$80                      |
| WP  |              |                 | \$40                            |                 | \$0                          |                 | \$20                      |
| Travel  |              |                 | \$1,300                         |                 | \$2,280                      |                 | \$0                       |
| Eqpt. & Supplies  |              |                 | \$500                           |                 | \$1,200                      |                 | \$0                       |
| <b>Total ODCs</b>                                       |              |                 | <b>\$2,410</b>                  |                 | <b>\$3,800</b>               |                 | <b>\$280</b>              |
| <b>Outside Services</b>                                 |              |                 |                                 |                 |                              |                 |                           |
| Recovery System Installation                            |              |                 | \$46,500                        |                 | \$0                          |                 | \$0                       |
| Product Hauling/Disposal (\$1,500/load of 7,000 gallon) |              |                 | \$0                             |                 | \$6,000                      |                 | \$0                       |
| Electrical Costs  |              |                 | \$0                             |                 | \$500                        |                 | \$0                       |
| Laboratory Fees   |              |                 | \$0                             |                 | \$200                        |                 | \$0                       |
| Other   |              |                 | \$0                             |                 | \$0                          |                 | \$0                       |
| <b>Total Outside Services</b>                           |              |                 | <b>\$46,500</b>                 |                 | <b>\$6,700</b>               |                 | <b>\$0</b>                |

| Proposal Estimate             | Task 1          | Task 2          | Task 3         |
|-------------------------------|-----------------|-----------------|----------------|
| Labor                         | \$10,349        | \$7,320         | \$2,253        |
| ODC's                         | \$2,410         | \$3,800         | \$280          |
| Outside Services              | \$46,500        | \$6,700         | \$0            |
| <b>Total by Task</b>          | <b>\$59,259</b> | <b>\$17,820</b> | <b>\$2,533</b> |
| <b>Total Labor</b>            | <b>\$19,922</b> |                 |                |
| <b>Total ODCs</b>             | <b>\$6,490</b>  |                 |                |
| <b>Total Outside Services</b> | <b>\$53,200</b> |                 |                |
| <b>Total Project</b>          | <b>\$79,612</b> |                 |                |

Task 1: LNAPL Recovery System Design and Construction

Task 2: Monthly Site Time and Travel Costs (per year)

Task 3: Report Preparation and Product Disposal

### Alternatives 1, 2, and 3: Long-Term Monitoring

#### Standard Rate Schedule

| Billing Category<br>Cost Code/(Billing Category) | Billing Rate | Task 1<br>(hrs) | Install New<br>POC<br>Wells (\$) | Task 2<br>(hrs)      | Annual<br>Sampling<br>(\$) | Task 3<br>(hrs) | Annual<br>Reporting<br>and PM (\$) |
|--|--------------|-----------------|----------------------------------|----------------------|----------------------------|-----------------|------------------------------------|
| Word Processor 88/(15)                           | \$30         | 0               | \$0                              | 0                    | \$0                        | 8               | \$240                              |
| CADD Operator 58/(25)                            | \$47         | 0               | \$0                              | 0                    | \$0                        | 4               | \$188                              |
| Technician 42/(50)                               | \$40         | 5               | \$200                            | 24                   | \$960                      | 0               | \$0                                |
| Staff Level 16/(65)                              | \$57         | 50              | \$2,850                          | 20                   | \$1,140                    | 24              | \$1,368                            |
| Project Level 12/(70)                            | \$65         | 4               | \$260                            | 4                    | \$260                      | 16              | \$1,040                            |
| Senior Level 10/(80)                             | \$85         | 1               | \$85                             | 0                    | \$0                        | 2               | \$170                              |
| Principal 02/(85)                                | \$97         | 0               | \$0                              | 0                    | \$0                        | 0               | \$0                                |
| <b>Total Labor (hrs  \$)</b>                     |              | <b>60</b>       | <b>\$3,395</b>                   | <b>48</b>            | <b>\$2,360</b>             | <b>54</b>       | <b>\$3,006</b>                     |
| <b>ODCs</b>                                      |              |                 |                                  |                      |                            |                 |                                    |
| Phone  |              |                 | \$20                             |                      | \$10                       |                 | \$20                               |
| Photocopy  |              |                 | \$10                             |                      | \$10                       |                 | \$50                               |
| Mail   |              |                 | \$50                             |                      | \$50                       |                 | \$25                               |
| Computer   |              |                 | \$0                              |                      | \$0                        |                 | \$60                               |
| CAD  |              |                 | \$0                              |                      | \$0                        |                 | \$100                              |
| WP   |              |                 | \$0                              |                      | \$0                        |                 | \$40                               |
| Travel   |              |                 | \$560                            |                      | \$580                      |                 | \$0                                |
| Eqpt. & Supplies                                 |              |                 | \$500                            |                      | \$200                      |                 | \$0                                |
| <b>Total ODCs</b>                                |              |                 | <b>\$1,140</b>                   |                      | <b>\$850</b>               |                 | <b>\$295</b>                       |
| <b>Outside Services</b>                          |              |                 |                                  |                      |                            |                 |                                    |
| Drilling Cost (4 wells to @ \$45/ft) + move      |              |                 | \$3,900                          |                      | \$0                        |                 | \$0                                |
|  |              |                 | \$0                              |                      | \$0                        |                 | \$0                                |
|  |              |                 | \$0                              |                      | \$0                        |                 | \$0                                |
| Laboratory Fees (BTEx/TVH), \$150ea, 2 sets/yr   |              | soil            | \$440                            | 6 LTM, 4 POC, 2qa/qc | \$3,000                    |                 | \$0                                |
| Other: Maintain Institutional Controls           |              |                 | \$0                              |                      | \$0                        |                 | \$0                                |
| <b>Total Outside Services</b>                    |              |                 | <b>\$4,340</b>                   |                      | <b>\$3,000</b>             |                 | <b>\$0</b>                         |

| Proposal Estimate             | Task 1          | Task 2         | Task 3         |
|-------------------------------|-----------------|----------------|----------------|
| Labor                         | \$3,395         | \$2,360        | \$3,006        |
| ODC's                         | \$1,140         | \$850          | \$295          |
| Outside Services              | \$4,340         | \$3,000        | \$0            |
| <b>Total by Task</b>          | <b>\$8,875</b>  | <b>\$6,210</b> | <b>\$3,301</b> |
| <b>Total Labor</b>            | <b>\$8,761</b>  |                |                |
| <b>Total ODCs</b>             | <b>\$2,285</b>  |                |                |
| <b>Total Outside Services</b> | <b>\$7,340</b>  |                |                |
| <b>Total Project</b>          | <b>\$18,386</b> |                |                |

Task 1: Install New POC Wells

Task 2: Annual Sampling

Task 3: Annual Reporting and PM

## Alternative 2: Bioslurping/Bioventing System Design and Installation

Standard Rate Schedule

| Billing Category<br>Cost Code/(Billing Category) | Task 1 | Work Plan (\$) | Task 2 | Pilot Study (\$) | Task 3 | Design (\$) | Task 4 | Bid (\$) | Task 5 | Installation (\$) | Task 6 | Bioslurping Annual Costs (\$) | Task 7 | Bioventing Annual Costs (\$) | Task 8 | PM/Report Annual Costs (\$) |
|--|--------|----------------|--------|------------------|--------|-------------|--------|----------|--------|-------------------|--------|-------------------------------|--------|------------------------------|--------|-----------------------------|
| Word Processor 88/(15)                           | 30     | \$600          | 0      | \$0              | 40     | \$1,200     | 20     | \$600    | 5      | \$150             | 0      | \$0                           | 0      | \$0                          | 8      | \$240                       |
| CADD Operator 58/(25)                            | 47     | \$470          | 0      | \$0              | 40     | \$1,880     | 0      | \$0      | 0      | \$0               | 0      | \$0                           | 0      | \$0                          | 8      | \$376                       |
| Technician 42/(50)                               | 40     | \$0            | 80     | \$3,200          | 0      | \$0         | 0      | \$0      | 80     | \$3,200           | 0      | \$0                           | 0      | \$0                          | 8      | \$320                       |
| Staff Level 16/(65)                              | 57     | \$3,420        | 80     | \$4,560          | 80     | \$4,560     | 40     | \$2,280  | 80     | \$4,560           | 416    | \$23,712                      | 48     | \$2,736                      | 40     | \$2,280                     |
| Project Level 12/(70)                            | 65     | \$1,300        | 50     | \$3,250          | 40     | \$2,600     | 20     | \$1,300  | 40     | \$2,600           | 26     | \$1,690                       | 16     | \$1,040                      | 16     | \$1,040                     |
| Senior Level 10/(80)                             | 85     | \$340          | 4      | \$340            | 5      | \$425       | 5      | \$425    | 10     | \$850             | 2      | \$170                         | 2      | \$170                        | 2      | \$170                       |
| Principal 02/(85)                                | 97     | \$194          | 0      | \$0              | 2      | \$194       | 2      | \$194    | 5      | \$485             | 1      | \$97                          | 1      | \$97                         | 1      | \$97                        |
| Total Labor (hrs) (\$)                           | 116    | \$6,324        | 214    | \$11,350         | 207    | \$10,859    | 87     | \$4,799  | 220    | \$11,845          | 445    | \$23,669                      | 67     | \$4,043                      | 83     | \$4,523                     |
| ODCs   |        |                |        |                  |        |             |        |          |        |                   |        |                               |        |                              |        |                             |
| Phone  |        | \$20           |        | \$20             |        | \$30        |        | \$20     |        | \$40              |        | \$120                         |        | \$20                         |        | \$60                        |
| Photocopy  |        | \$30           |        | \$30             |        | \$100       |        | \$100    |        | \$0               |        | \$0                           |        | \$0                          |        | \$100                       |
| Mail/Shipping                                    |        | \$45           |        | \$45             |        | \$30        |        | \$30     |        | \$0               |        | \$1,040                       |        | \$80                         |        | \$75                        |
| Computer   |        | \$200          |        | \$200            |        | \$500       |        | \$200    |        | \$0               |        | \$0                           |        | \$0                          |        | \$200                       |
| CAD  |        | \$150          |        | \$150            |        | \$300       |        | \$300    |        | \$0               |        | \$0                           |        | \$0                          |        | \$80                        |
| WIP  |        | \$200          |        | \$200            |        | \$200       |        | \$100    |        | \$0               |        | \$0                           |        | \$0                          |        | \$80                        |
| Travel   |        | \$0            |        | \$1,890          |        | \$0         |        | \$0      |        | \$1,260           |        | \$15,080                      |        | \$0                          |        | \$0                         |
| Eqpt. & Supplies                                 |        | \$0            |        | \$800            |        | \$0         |        | \$0      |        | \$50,000          |        | \$2,080                       |        | \$400                        |        | \$0                         |
| Total ODCs                                       |        | \$645          |        | \$2,710          |        | \$1,160     |        | \$420    |        | \$51,300          |        | \$18,320                      |        | \$1,660                      |        | \$95                        |
| Outside Services                                 |        |                |        |                  |        |             |        |          |        |                   |        |                               |        |                              |        |                             |
| Drilling Cost                                    |        | \$0            |        | \$4,750          |        | \$0         |        | \$0      | 8 VWs, | \$26,000          |        | \$0                           |        | \$0                          |        | \$0                         |
| Electrical Costs                                 |        | \$0            |        | \$0              |        | \$0         |        | \$0      |        | \$0               |        | \$1,300                       |        | \$325                        |        | \$0                         |
| Natural Gas Costs                                |        | \$0            |        | \$0              |        | \$0         |        | \$0      |        | \$0               |        | \$0                           |        | \$0                          |        | \$0                         |
| Laboratory Fees                                  |        | \$0            |        | \$700            |        | \$0         |        | \$0      |        | \$5,000           |        | \$6,000                       |        | \$2,500                      |        | \$0                         |
| Construction Costs                               |        | \$0            |        | \$0              |        | \$0         |        | \$0      |        | \$42,000          |        | \$0                           |        | \$0                          |        | \$0                         |
| Total Outside Services                           |        | \$0            |        | \$5,450          |        | \$0         |        | \$0      |        | \$73,000          |        | \$7,300                       |        | \$2,825                      |        | \$0                         |

| Proposal Estimate      | Task 1    | Task 2   | Task 3   | Task 4  | Task 5    | Task 6   | Task 7  | Task 8  |
|------------------------|-----------|----------|----------|---------|-----------|----------|---------|---------|
| Labor                  | \$6,324   | \$11,350 | \$10,859 | \$4,799 | \$11,845  | \$23,669 | \$4,043 | \$4,523 |
| ODCs                   | \$645     | \$2,710  | \$1,160  | \$420   | \$51,300  | \$18,320 | \$1,660 | \$95    |
| Outside Services       | \$0       | \$5,450  | \$0      | \$0     | \$73,000  | \$7,300  | \$2,825 | \$0     |
| Total by Task          | \$6,969   | \$19,510 | \$12,019 | \$5,219 | \$136,145 | \$51,289 | \$8,528 | \$5,118 |
| Total Labor            | \$70,846  |          |          |         |           |          |         |         |
| Total ODCs             | \$74,555  |          |          |         |           |          |         |         |
| Total Outside Services | \$85,750  |          |          |         |           |          |         |         |
| Total Project          | \$231,151 |          |          |         |           |          |         |         |

- Task 1: Work Plan Development
- Task 2: Bioslurping/Bioventing Pilot Study
- Task 3: Design
- Task 4: Prepare and Solicit Bids
- Task 5: System Installation
- Task 6: Bioslurping System Operation, Maintenance, Annual Monitoring, and Project Management
- Task 7: Bioventing System Operation, Maintenance, Annual Monitoring, and Project Management
- Task 8: Annual Report/Project Management

### Alternative 3: Soil Excavation in LNAPL Area with Bioventing at Plume Fringes System Design and Installation

#### Standard Rate Schedule

| Billing Category              | Cost Code (Billing Category) | Rate  | Task 1 | Work Plan (\$) | Task 2  | Pilot Studies (\$) | Task 3 | Design (\$) | Task 4 | Bid (\$) | Task 5  | Excavation/Installation (\$) | Task 6 | Bioventing Annual Costs (\$) | Task 7 | Bioventing Annual Costs (\$) |
|-------------------------------|------------------------------|-------|--------|----------------|---------|--------------------|--------|-------------|--------|----------|---------|------------------------------|--------|------------------------------|--------|------------------------------|
| Word Processor                | 88/(15)                      | \$30  | 20     | \$600          | 0       | \$0                | 40     | \$1,200     | 20     | \$600    | 5       | \$150                        | 0      | \$0                          | 8      | \$240                        |
| CADD Operator                 | 58/(25)                      | \$47  | 10     | \$470          | 0       | \$0                | 40     | \$1,880     | 0      | \$0      | 0       | \$0                          | 0      | \$0                          | 8      | \$376                        |
| Technician                    | 42/(50)                      | \$40  | 0      | \$0            | 40      | \$1,600            | 0      | \$0         | 0      | \$0      | 80      | \$3,200                      | 0      | \$0                          | 8      | \$320                        |
| Staff Level                   | 16/(65)                      | \$57  | 60     | \$3,420        | 20      | \$2,280            | 80     | \$4,560     | 40     | \$2,280  | 80      | \$4,560                      | 48     | \$2,736                      | 40     | \$2,280                      |
| Project Level                 | 12/(70)                      | \$65  | 20     | \$1,300        | 40      | \$2,600            | 40     | \$2,600     | 20     | \$1,300  | 40      | \$2,600                      | 16     | \$1,040                      | 16     | \$1,040                      |
| Senior Level                  | 10/(80)                      | \$85  | 4      | \$340          | 4       | \$340              | 5      | \$425       | 5      | \$425    | 10      | \$850                        | 2      | \$170                        | 2      | \$170                        |
| Principal                     | 02/(85)                      | \$97  | 2      | \$194          | 0       | \$0                | 2      | \$194       | 2      | \$194    | 5       | \$485                        | 1      | \$97                         | 1      | \$97                         |
| Total Labor (hrs/\$)          |                              |       | 116    | \$6,324        | 104     | \$5,520            | 207    | \$10,859    | 87     | \$4,799  | 220     | \$11,845                     | 67     | \$4,043                      | 83     | \$4,523                      |
| ODC's                         |                              |       |        |                |         |                    |        |             |        |          |         |                              |        |                              |        |                              |
| Phone                         |                              | \$20  |        |                |         | \$20               |        | \$20        |        | \$20     |         | \$40                         |        | \$20                         |        | \$60                         |
| Photocopy                     |                              | \$30  |        |                |         | \$30               |        | \$100       |        | \$100    |         | \$0                          |        | \$0                          |        | \$100                        |
| Mail                          |                              | \$45  |        |                |         | \$45               |        | \$30        |        | \$30     |         | \$0                          |        | \$80                         |        | \$75                         |
| Computer                      |                              | \$200 |        |                |         | \$200              |        | \$500       |        | \$200    |         | \$0                          |        | \$0                          |        | \$200                        |
| CAD                           |                              | \$150 |        |                |         | \$150              |        | \$300       |        | \$300    |         | \$0                          |        | \$0                          |        | \$80                         |
| WP                            |                              | \$200 |        |                |         | \$200              |        | \$200       |        | \$100    |         | \$0                          |        | \$0                          |        | \$80                         |
| Travel                        |                              | \$0   |        |                |         | \$1,100            |        | \$0         |        | \$0      |         | \$1,550                      |        | \$1,160                      |        | \$0                          |
| Egpt. & Supplies              |                              | \$0   |        |                |         | \$600              |        | \$0         |        | \$0      |         | \$750                        |        | \$400                        |        | \$0                          |
| Total ODCs                    |                              |       |        | \$645          |         | \$1,720            |        | \$1,160     |        | \$420    |         | \$2,340                      |        | \$1,660                      |        | \$595                        |
| Outside Services              |                              |       |        |                |         |                    |        |             |        |          |         |                              |        |                              |        |                              |
| Drilling Cost                 |                              | \$0   |        |                | 1-VW, 3 | \$5,000            |        | \$0         |        | \$0      | 7 VWs,  | \$21,250                     |        | \$0                          |        | \$0                          |
| Electrical Costs              |                              | \$0   |        |                |         | \$0                |        | \$0         |        | \$0      | 1,000 y | \$50,000                     |        | \$325                        |        | \$0                          |
| Soil Excavation               |                              | \$0   |        |                |         | \$0                |        | \$0         |        | \$0      |         | \$12,000                     |        | \$0                          |        | \$0                          |
| Soil Disposal                 |                              | \$0   |        |                |         | \$1,100            |        | \$0         |        | \$0      |         | \$11,000                     |        | \$2,500                      |        | \$0                          |
| Laboratory Fees               |                              | \$0   |        |                |         | \$0                |        | \$0         |        | \$0      |         | \$30,000                     |        | \$0                          |        | \$0                          |
| Bioventing Construction Costs |                              | \$0   |        |                |         | \$0                |        | \$0         |        | \$0      |         | \$124,250                    |        | \$2,825                      |        | \$0                          |
| Total Outside Services        |                              |       |        | \$0            |         | \$6,100            |        | \$0         |        | \$0      |         | \$124,250                    |        | \$2,825                      |        | \$0                          |

| Proposal Estimate      | Task 1    | Task 2   | Task 3   | Task 4  | Task 5    | Task 6  | Task 7  |
|------------------------|-----------|----------|----------|---------|-----------|---------|---------|
| Labor                  | \$6,324   | \$5,520  | \$10,859 | \$4,799 | \$11,845  | \$4,043 | \$4,523 |
| ODC's                  | \$645     | \$1,720  | \$1,160  | \$420   | \$2,340   | \$1,660 | \$595   |
| Outside Services       | \$0       | \$6,100  | \$0      | \$0     | \$124,250 | \$2,825 | \$0     |
| Total by Task          | \$6,969   | \$13,340 | \$12,019 | \$5,219 | \$138,435 | \$8,528 | \$5,118 |
| Total Labor            | \$43,390  |          |          |         |           |         |         |
| Total ODCs             | \$7,945   |          |          |         |           |         |         |
| Total Outside Services | \$133,175 |          |          |         |           |         |         |
| Total Project          | \$184,510 |          |          |         |           |         |         |

- Task 1: Work Plan Development
- Task 2: Bioventing Pilot Study
- Task 3: Design
- Task 4: Prepare and Solicit Bids
- Task 5: Soil Excavation / Bioventing System Installation
- Task 6: Bioventing System Operation, Maintenance, and Annual Monitoring
- Task 7: Project Management/Annual Reporting

# Seymour Johnson AFB Backup Calculations

## Misc calculations

### Recovery System

Number of LNAPL recovery wells: 2,400 sq ft  
 Area to be covered: 15 ft  
 Well radius of influence: 707 sq ft  
 Area of influence: 3  
 Number of wells: 20 ft  
 Depth each:

### Trench Volume/Area

Width: 12 in  
 Depth: 4 ft  
 Length: 500 ft  
 Volume: 2,000 cf  
 Surface Area: 74 cy  
 500 sf  
 56 sy

### Concrete Volume/Area

Length: 100 lf  
 Width: 6 in  
 Thickness: 6 in  
 Volume: 25 cf  
 Area: 1 cy  
 50 sf  
 6 sy

### Groundwater Treatment

#### Groundwater treatment wells

Number: - ft  
 Depth: -

### Trench Volume/Area

Width: - in  
 Depth: - ft  
 Length: - ft  
 Volume: - cf  
 Surface Area: - cy  
 - sf  
 - sy

## Cost calculations

### Recovery System Installation

| Description       | Unit  | Quantity | Unit Price | Subtotal | Total    |
|-------------------|-------|----------|------------|----------|----------|
| Well Installation | ea    | 1        | \$ 300     | \$ 300   |          |
| Mobilization      | ln ft | 60       | \$ 45      | \$ 2,700 |          |
| Soil Disposal     | drum  | 4        | \$ 100     | \$ 400   | \$ 3,400 |
| Trenching/Piping  | ea    | 1        | \$ 1,000   | \$ 1,000 |          |
| Mob/Demob         | ln ft | 100      | \$ 18.80   | \$ 1,880 |          |
| Concrete Cutting  | cy    | 74       | \$ 5.05    | \$ 374   |          |
| Pipe laying       | ln ft | 600      | \$ 13.05   | \$ 7,830 |          |
| Backfill          | cy    | 74       | \$ 17.20   | \$ 1,273 |          |
| Compaction        | cy    | 74       | \$ 5.10    | \$ 377   |          |
| Pavement Base     | sy    | 56       | \$ 5.25    | \$ 294   |          |
| Concrete repair   | cy    | 1        | \$ 97.00   | \$ 97    |          |
| Reseeding         | sy    | 100      | \$ 1.91    | \$ 191   |          |

### System Installation

|             |        |     |          |          |  |
|-------------|--------|-----|----------|----------|--|
| Skimmers    | ea     | 10  | \$ 500   | \$ 5,000 |  |
| Compressors | ea     | 2   | \$ 3,000 | \$ 6,000 |  |
| Tank        | ea     | 1   | \$ 5,725 | \$ 5,725 |  |
| Piping      | lf     | 250 | \$ 9.30  | \$ 2,325 |  |
| Mechanical  | man hr | 80  | \$ 38.83 | \$ 3,106 |  |
| Electrical  | ls     | 1   | \$ 2,500 | \$ 2,500 |  |
| Slab        | cy     | 2   | \$ 97.00 | \$ 194   |  |
| Building    | ea     | 1   | \$ 4,925 | \$ 4,925 |  |

### Recovery System Installation Total

\$ 29,775

### Groundwater Treatment System

|                     |        |   |           |      |  |
|---------------------|--------|---|-----------|------|--|
| Well Installation   | ea     | - | \$ 1,000  | \$ - |  |
| Mobilization        | ln ft  | - | \$ 45     | \$ - |  |
| Well Installation   | drum   | - | \$ 100    | \$ - |  |
| Soil Disposal       | ea     | - | \$ 1,000  | \$ - |  |
| Trenching/Piping    | cy     | - | \$ 5.05   | \$ - |  |
| Mob/Demob           | ln ft  | - | \$ 13.05  | \$ - |  |
| Pipe laying         | cy     | - | \$ 17.20  | \$ - |  |
| Backfill            | cy     | - | \$ 5.10   | \$ - |  |
| Compaction          | sy     | - | \$ 1.91   | \$ - |  |
| Reseeding           | ea     | - | \$ 700    | \$ - |  |
| System Installation | ea     | - | \$ 20,000 | \$ - |  |
| Pumps               | ea     | - | \$ 9.30   | \$ - |  |
| Air Stripper        | lf     | - | \$ 38.83  | \$ - |  |
| Piping              | man hr | - | \$ 2,500  | \$ - |  |
| Mechanical          | ls     | - | \$ 97.00  | \$ - |  |
| Electrical          | cy     | - | \$ 4,925  | \$ - |  |
| Slab                | ea     | - | \$ -      | \$ - |  |
| Building            | ea     | - | \$ -      | \$ - |  |

### System Installation

|              |        |   |           |      |  |
|--------------|--------|---|-----------|------|--|
| Pumps        | ea     | - | \$ 700    | \$ - |  |
| Air Stripper | ea     | - | \$ 20,000 | \$ - |  |
| Piping       | lf     | - | \$ 9.30   | \$ - |  |
| Mechanical   | man hr | - | \$ 38.83  | \$ - |  |
| Electrical   | ls     | - | \$ 2,500  | \$ - |  |
| Slab         | cy     | - | \$ 97.00  | \$ - |  |
| Building     | ea     | - | \$ 4,925  | \$ - |  |

### Groundwater Treatment System

\$ -